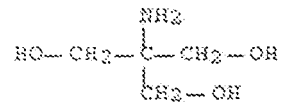
```
=> d stat que l15
L1             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  ERYTHROPOIETIN/CN
L3             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  THAM/CN
L13        14931 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 OR ERYTHROPOIETIN?
L14         6724 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR TRISHYDROXYMETHYLAMINOME
                 THANE?
L15           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13 AND L14


=> d ibib abs hitstr l15 1-18

L15  ANSWER 1 OF 18  HCAPLUS  COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:         2007:850743  HCAPLUS  Full-text
DOCUMENT NUMBER:          147:308033
TITLE:                    Application of erythropoietin carbamoyl derivative
                          to prepare the medical preparations
INVENTOR(S):              Lu, Chuanzhen; Xiao, Baoguo; Ding, Jing; Zhou,
                          Yongchun; Zhang, Yujing
PATENT ASSIGNEE(S):       Huashan Hospital, Fudan University, Peop. Rep. China;
                          Shanghai Clonbiotech Co., Ltd.
SOURCE:                   Faming Zhuanli Shenqing Gongkai Shuomingshu, 17pp.
                          CODEN: CNXXEV
DOCUMENT TYPE:            Patent
LANGUAGE:                 Chinese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     CN 101007166          A     20070801    CN 2006-10147583        20061220
PRIORITY APPLN. INFO.:                       CN 2006-10147583        20061220
AB   The invention relates to the application of erythropoietin carbamoyl
     derivative to prepare the medical prepns. for promoting nerve cell
     regeneration, preventing and treating nerve cell injury, treating acute
     hypoxic ischemic encephalopathy (such as respiratory dysfunction and oxygen
     insufficiency induced by wound, nerve gas, status epilepsy, respiratory muscle
     paralysis, and anesthesia accident; respiratory tract obstruction and
     pulmonary alveolar hypoxia induced by severe glosso-coma induced by laryngeal
     edema or spasm, severe pulmonary edema, foreign body of respiratory tract, and
     coma; Hb oxygen-carrying dysfunction induced by CO or nitrites toxicosis;
     cerebral ischemia induced by acute hematorrhea, severe heart failure,
     emphysema, cardiac extra systole, respiratory arrest, and hypoxemia), chronic
     hypoxic encephalopathy (such as pulmonary encephalopathy, coronary heart
     disease, ischemic cerebrovascular disease, blood hyperviscosity,
     arteriosclerotic hypertension, shock, acute respiratory failure, CO toxicosis,
     and vascular dementia).
IT   11096-26-7DP, Erythropoietin, carbamoyl derivative
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (application of erythropoietin carbamoyl derivative to prepare the
        medical prepns.)
RN   11096-26-7  HCAPLUS
CN   Erythropoietin  (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT   11096-26-7, Erythropoietin
```

RL: RCT (Reactant); RACT (Reactant or reagent)
(application of **erythropoietin** carbamoyl derivative to prepare the medical prepns.)
RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 77-86-1, Tris
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(application of **erythropoietin** carbamoyl derivative to prepare the medical prepns.)
RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:817006 HCAPLUS Full-text
DOCUMENT NUMBER: 147:197358
TITLE: Stable therapeutic formulations
INVENTOR(S): Ameri, Mahmoud; Cormier, Michel J. N.; Sellers, Scott; Maa, Yuh-Fun
PATENT ASSIGNEE(S): Alza Corp., USA
SOURCE: PCT Int. Appl., 50pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

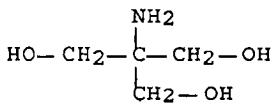
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007084247 | A2 | 20070726 | WO 2006-US49488 | 20061228 |
| WO 2007084247 | A9 | 20070913 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| US 20070184096 | A1 | 20070809 | US 2006-617639 | 20061228 |
| PRIORITY APPLN. INFO.: | | | US 2005-754948P P | 20051228 |

AB Compns. of and methods for formulating and delivering biol. active agent formulations having enhanced phys. stability, and wherein deterioration from the presence of oxygen and/or water is minimized and/or controlled, to yield a

stable formulation are claimed. The compns. of and methods for formulating and delivering biol. active agents of the present invention further facilitate their incorporation into a biocompatible coating which can be employed to coat a stratum corneum piercing microprojection, or a plurality of stratum corneum piercing microprojections of a delivery device, for delivery of the biocompatible coating through the skin of a subject, thus providing an effective means of delivering the biol. active agents. A delivery device having stratum corneum piercing microprojections coated with a formulation of hPTH (1-34)was prepared The primary packaging for all dosages of the systems was a heat sealed foil pouch purged with nitrogen gas. The moisture and oxygen levels were substantially reduced in the packages.

IT 77-86-1, Tromethamine **11096-26-7, Erythropoietin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stable therapeutic formulations)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:735323 HCAPLUS Full-text
DOCUMENT NUMBER: 145:174327
TITLE: Therapeutic peptide formulations with improved stability for transdermal delivery
INVENTOR(S): Cormier, Michel J. N.; Ameri, Mahmoud
PATENT ASSIGNEE(S): Alza Corporation, USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006079019 | A2 | 20060727 | WO 2006-US2262 | 20060119 |
| WO 2006079019 | A3 | 20061221 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,

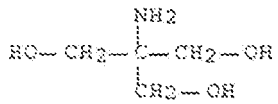
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

| | | | | |
|---|---|---|---|---|
| AU 2006206272 | A1 | 20060727 | AU 2006-206272 | 20060119 |
| CA 2593112 | A1 | 20060727 | CA 2006-2593112 | 20060119 |
| US 20060188555 | A1 | 20060824 | US 2006-336134 | 20060119 |
| EP 1838290 | A2 | 20071003 | EP 2006-719212 | 20060119 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 101106979 | A | 20080116 | CN 2006-80002845 | 20060119 |
| IN 2007DN04891 | A | 20070817 | IN 2007-DN4891 | 20070625 |
| PRIORITY APPLN. INFO.: | | | US 2005-645996P P | 20050121 |
| | | | WO 2006-US2262 W | 20060119 |

AB Compns. of and methods for formulating and delivering peptide, polypeptide and protein therapeutic agent formulations having enhanced phys. stability, and wherein fibril formation is minimized and/or controlled, to yield a consistent and predictable composition viscosity are provided. The compns. of and methods for formulating and delivering peptide, polypeptide and protein therapeutic agents of the present invention further facilitate their incorporation into a biocompatible coating which can be employed to coat a stratum-corneum piercing microprojection, or a plurality of stratum-corneum piercing microprojections of a transdermal delivery device, for delivery of the biocompatible coating through the skin of a subject, thus providing an effective means of delivering the peptide therapeutic agents. Thus, to an aqueous solution of the GRF analog TH 9507 acetate salt, chloride ions (as sodium chloride) were added. As added chloride ion nears an equimolar concentration to that of acetate, the solution viscosity was relatively low and stable, and fibril formation was minimal. Where there was a molar excess of acetate or chloride, the viscosity increased and changed over time, with evidence of fibril formation.

IT **77-86-1**, Tromethamine **11096-26-7**, **Erythropoietin**
RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides or proteins delivery system with improved stability incorporated in coating for transdermal microprojector)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:343036 HCAPLUS Full-text
DOCUMENT NUMBER: 144:382029
TITLE: Use of nitrogen-containing compounds for the prevention of drug-induced cell toxicity
INVENTOR(S): Nykjaer, Anders
PATENT ASSIGNEE(S): Recepticon Aps, Den.
SOURCE: PCT Int. Appl., 69 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

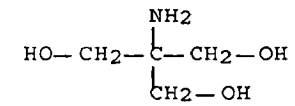
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006037335 | A2 | 20060413 | WO 2005-DK640 | 20051005 |
| WO 2006037335 | A3 | 20061207 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| CA 2581489 | A1 | 20060413 | CA 2005-2581489 | 20051005 |
| EP 1809381 | A2 | 20070725 | EP 2005-788843 | 20051005 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | | |
| CN 101076372 | A | 20071121 | CN 2005-80034127 | 20051005 |
| IN 2007CN01409 | A | 20070831 | IN 2007-CN1409 | 20070405 |
| PRIORITY APPLN. INFO.: | | | DK 2004-1529 A | 20041006 |
| | | | WO 2005-DK640 W | 20051005 |

OTHER SOURCE(S): MARPAT 144:382029

AB The invention discloses the use of compds. for the manufacture of a medicament for the prophylaxis and/or treatment of induced cell toxicity, e.g. nephrotoxicity and ototoxicity, in particular where the cell toxicity is induced by a medical treatment. In a preferred embodiment, the compds. have at least two nitrogen atoms, more preferably at least two amino groups. The compds. of the invention are capable of docking binding of cytotoxic compds. to the megalin receptor, and thereby inhibiting uptake of the cytotoxic compds. into cells. The invention further discloses compds. for use in the treatment, as well as a method for reducing the cell toxicity of cytotoxic compds.

IT 77-86-1, Tromethamine **11096-26-7, Erythropoietin**
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(nitrogen-containing compds. for prevention of drug-induced cell toxicity)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:79129 HCAPLUS Full-text
DOCUMENT NUMBER: 144:177464
TITLE: Fatty acid formulations for oral delivery of proteins and peptides, and uses thereof
INVENTOR(S): Radhakrishnan, Balasingam; Aggarwal, Diti; Ferro, Michelle; James, Kenneth D.; Malkar, Navdeep B.; Miller, Mark A.; Pavliv, Leo; Polowy, Karen; Puskas, Monica; Ekwuribe, Nnochiri N.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 103 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 20060018874 | A1 | 20060126 | US 2005-184528 | 20050719 |
| US 20060019873 | A1 | 20060126 | US 2005-184594 | 20050719 |
| US 20060019874 | A1 | 20060126 | US 2005-184668 | 20050719 |
| AU 2005269753 | A2 | 20060209 | AU 2005-269753 | 20050719 |
| AU 2005269753 | A1 | 20060209 | | |
| CA 2580313 | A1 | 20060209 | CA 2005-2580313 | 20050719 |
| WO 2006014673 | A2 | 20060209 | WO 2005-US25644 | 20050719 |
| WO 2006014673 | A3 | 20060817 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| EP 1773878 | A2 | 20070418 | EP 2005-773736 | 20050719 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 101027318 | A | 20070829 | CN 2005-80031521 | 20050719 |
| JP 2008506782 | T | 20080306 | JP 2007-522670 | 20050719 |
| MX 200700883 | A | 20070402 | MX 2007-883 | 20070119 |
| NO 2007000859 | A | 20070412 | NO 2007-859 | 20070215 |
| IN 2007DN01264 | A | 20070803 | IN 2007-DN1264 | 20070215 |
| KR 2007059060 | A | 20070611 | KR 2007-703822 | 20070216 |

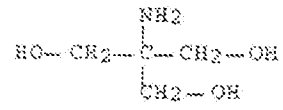
| | | | |
|---|---|---|---|
| PRIORITY APPLN. INFO.: | US 2004-589058P | P | 20040719 |
| | US 2004-619153P | P | 20041015 |
| | US 2004-632578P | P | 20041202 |
| | US 2005-655803P | P | 20050224 |
| | US 2005-655838P | P | 20050224 |
| | WO 2005-US25644 | W | 20050719 |

OTHER SOURCE(S): MARPAT 144:177464

AB Fatty acid compns. for administration of pharmaceutical agents, such as proteins and peptides, protein and peptide conjugates, and/or cation-polypeptide conjugate complexes are described. In particular, the invention provides a solid pharmaceutical composition formulated for oral administration by ingestion, having about 0.1 to about 75% weight/weight fatty acid component comprising saturated or unsatd. C4-12 fatty acids and/or salts of such fatty acids, and a therapeutic agent. Further, the invention provides a liquid pharmaceutical composition formulated for oral administration by ingestion, having about 0.1 to about 10% weight/volume fatty acid component comprising saturated or unsatd. C4-12 fatty acids and/or salts of such fatty acids, and a therapeutic agent. For example, an oral liquid diluent was prepared containing tromethamine 4.24, trolamine 5.22, citric acid 6.72, sodium hydroxide pellets 1.88, capric acid 0.50, lauric acid 0.50, 1N NaOH or 1N HCl as needed to pH 7.7-7.9, and water to 100%. Insulin derivs. IN105, HIM2 or ZnHIM2 was combined in amts. necessary to achieve appropriate concentration for dosing studies, e.g., 1 mg, with 1 mL of formulation to yield a 1 mg/mL insulin derivative in formulation.

IT **77-86-1**, Tromethamine **11096-26-7**, **Erythropoietin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty acid formulations for oral delivery of proteins and peptides)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:983999 HCAPLUS Full-text
DOCUMENT NUMBER: 143:282201
TITLE: Solution additives for the attenuation of protein aggregation
INVENTOR(S): Bernhardt, Trout L.; Wang, Daniel I. C.; Baynes, Brian N.
PATENT ASSIGNEE(S): Massachusetts Institute of Technology, USA
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005082109 | A2 | 20050909 | WO 2005-US6603 | 20050228 |
| WO 2005082109 | A3 | 20060504 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,

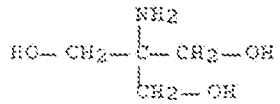
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-547969P P 20040226
OTHER SOURCE(S): MARPAT 143:282201

AB In part, the present invention relates to a compound or polymer comprising a non-protein-binding moiety and at least one protein-binding group. The present invention relates to a method of screening compds. or polymers for the property of inhibiting protein aggregation in solution, a method of preparing a compound or polymer having the property of protein aggregation inhibition in solution, a method of classifying a compound or polymer as either inhibitory of protein aggregation in solution or not inhibitory of protein aggregation in solution, and to a method of determining the preferential binding coefficient, $\Gamma_{XP}$, of an additive in a protein solution The present invention also relates to a method of suppressing or preventing aggregation of a protein in solution, a method of decreasing the toxicol. risk associated with administering a protein to a mammal in need thereof, and a method of facilitating native folding of a recombinant protein in solution Refolding of carbonic anhydrase was accomplished by dilution from high concns. of guanidinium chloride.

IT 77-86-1D, TRIS, dendrimers
RL: PRP (Properties)
(as nonprotein-binding component of compound attenuating protein aggregation; solution additives for attenuation of protein aggregation)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



IT **11096-26-7, Erythropoietin**
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(recombinant human; solution additives for attenuation of protein aggregation)

RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:614580 HCAPLUS Full-text
DOCUMENT NUMBER: 143:139175
TITLE: Frequency-assisted transdermal agent delivery method and system
INVENTOR(S): Chan, Keith T.; Cormier, Michel J. N.; Lin, WeiQi
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 24 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

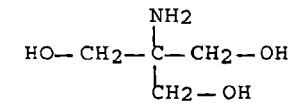
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 20050153873 | A1 | 20050714 | US 2004-971441 | 20041021 |
| AU 2004314416 | A1 | 20050804 | AU 2004-314416 | 20041021 |
| WO 2005069758 | A2 | 20050804 | WO 2004-US34923 | 20041021 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| BR 2004017757 | A | 20070410 | BR 2004-17757 | 20041021 |
| JP 2007519446 | T | 20070719 | JP 2006-549239 | 20041021 |

PRIORITY APPLN. INFO.: US 2004-535275P P 20040109
WO 2004-US34923 W 20041021

AB The invention discloses an apparatus and method for transdermally delivering a biol. active agent comprising a delivery system having a microprojection member (or system) that includes a plurality of microprojections (or array thereof) that are adapted to pierce through the stratum corneum into the underlying epidermis layer, or epidermis and dermis layers, a formulation containing the biol. active agent and an oscillation-inducing device. In one embodiment, the biol. active agent is contained in a biocompatible coating that is applied to the microprojection member. In a further embodiment, the delivery system includes a gel pack having an agent-containing hydrogel formulation that is disposed on the microprojection member after application to the skin of a patient. In an alternative embodiment, the biol. active agent is contained in both the coating and the hydrogel formulation.

IT **11096-26-7, Erythropoietin**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(frequency-assisted transdermal agent delivery method and system)
RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT 77-86-1, Tromethamine
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(frequency-assisted transdermal agent delivery method and system)
RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:497219 HCAPLUS Full-text
DOCUMENT NUMBER: 143:32345
TITLE: Controlled solubility transdermal formulations with counter ions for coating microprojections of an applicator
INVENTOR(S): Ameri, Mahmoud; Lin, Weiqi; Cormier, Michel J. N.; Maa, Yuh-Fun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S. Ser. No. 880,702.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 20050123507 | A1 | 20050609 | US 2005-34891 | 20050112 |
| US 20040265354 | A1 | 20041230 | US 2004-880702 | 20040629 |
| AU 2004255218 | A1 | 20050120 | AU 2004-255218 | 20040629 |
| CA 2530531 | A1 | 20050120 | CA 2004-2530531 | 20040629 |
| EP 1638523 | A2 | 20060329 | EP 2004-756422 | 20040629 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR 2004012029 | A | 20060905 | BR 2004-12029 | 20040629 |
| CN 1842320 | A | 20061004 | CN 2004-80024334 | 20040629 |
| JP 2007527392 | T | 20070927 | JP 2006-518731 | 20040629 |
| AU 2004253571 | A1 | 20050113 | AU 2004-253571 | 20040701 |
| CA 2530954 | A1 | 20050113 | CA 2004-2530954 | 20040701 |
| WO 2005002453 | A1 | 20050113 | WO 2004-US21393 | 20040701 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 20050025778 | A1 | 20050203 | US 2004-884603 | 20040701 |
| EP 1643918 | A1 | 20060412 | EP 2004-756609 | 20040701 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR 2004012202 | A | 20060822 | BR 2004-12202 | 20040701 |
| CN 1845708 | A | 20061011 | CN 2004-80025139 | 20040701 |
| JP 2007521092 | T | 20070802 | JP 2006-518804 | 20040701 |
| MX 2006PA00281 | A | 20060703 | MX 2006-PA281 | 20060105 |
| MX 2006PA00094 | A | 20061009 | MX 2006-PA94 | 20060105 |
| AU 2006204977 | A1 | 20060720 | AU 2006-204977 | 20060111 |
| CA 2593111 | A1 | 20060720 | CA 2006-2593111 | 20060111 |
| WO 2006076403 | A1 | 20060720 | WO 2006-US934 | 20060111 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, | | | | |

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

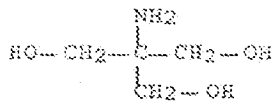
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

| | | | | |
|---|---|---|---|---|
| EP 1835857 | A1 | 20070926 | EP 2006-718051 | 20060111 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| CN 101137333 | A | 20080305 | CN 2006-80007669 | 20070910 |
| PRIORITY APPLN. INFO.: | | | US 2003-484020P | P 20030630 |
| | | | US 2003-484930P | P 20030702 |
| | | | US 2004-880702 | A2 20040629 |
| | | | WO 2004-US21004 | W 20040629 |
| | | | WO 2004-US21393 | W 20040701 |
| | | | US 2005-34891 | A 20050112 |
| | | | WO 2006-US934 | W 20060111 |

AB The invention provides a composition for coating a transdermal delivery device having stratum corneum-piercing microprojections comprising a formulation of a biol. active agent, a nonvolatile counterion and a volatile counterion, wherein said nonvolatile counterion causes the formation of a first species of said biol. active agent that has improved solubility when said formulation is dried and wherein said volatile counterion causes the formation of a second species of said biol. active agent that has reduced solubility when said formulation is dried. The biol. active agents include hormones.

IT **77-86-1**, Tromethamine **11096-26-7**, **Erythropoietin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled solubility transdermal formulations with counter ions for coating microprojections of an applicator)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:485352 HCAPLUS Full-text
DOCUMENT NUMBER: 143:13400
TITLE: **Erythropoietin** solution formulation
INVENTOR(S): Arnold, Stefan; Franssen, Okke; Mekking, Albert
PATENT ASSIGNEE(S): Biogenerix Ag, Germany
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

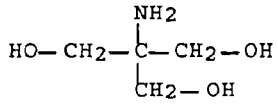
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1537876 | A1 | 20050608 | EP 2003-27460 | 20031201 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| AU 2004294289 | A1 | 20050616 | AU 2004-294289 | 20041201 |
| CA 2545880 | A1 | 20050616 | CA 2004-2545880 | 20041201 |
| WO 2005053745 | A1 | 20050616 | WO 2004-EP13619 | 20041201 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AT 355081 | T | 20060315 | AT 2004-803390 | 20041201 |
| EP 1689437 | A1 | 20060816 | EP 2004-803390 | 20041201 |
| EP 1689437 | B1 | 20070228 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS | | | | |
| BR 2004016679 | A | 20070213 | BR 2004-16679 | 20041201 |
| ES 2280057 | T3 | 20070901 | ES 2004-803390 | 20041201 |
| MX 2006PA05791 | A | 20060714 | MX 2006-PA5791 | 20060522 |
| US 20070128231 | A1 | 20070607 | US 2006-581269 | 20060601 |

| | | | |
|---|---|---|---|
| PRIORITY APPLN. INFO.: | EP 2003-27460 | A | 20031201 |
| | WO 2004-EP13619 | W | 20041201 |

AB A stable pharmaceutical formulation of **erythropoietin** is disclosed which contains tris-(hydroxymethyl)-aminomethane as stabilizer, whereby the formulation does not contain amino acids or human serum albumin.

IT 77-86-1, Tris-(hydroxymethyl)-aminomethane
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stable **erythropoietin** solution formulation)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



IT **11096-26-7, Erythropoietin**
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(stable **erythropoietin** solution formulation)

RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

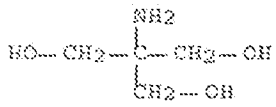
L15 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:429196 HCAPLUS Full-text
DOCUMENT NUMBER: 142:469308
TITLE: Coatings on transdermal delivery devices containing biological active agents and viscosity-enhancing couterion
INVENTOR(S): Ameri, Mahmoud; Cormier, Michel; Maa, Yuh-fun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| US 20050106209 | A1 | 20050519 | US 2004-970890 | | 20041021 |
| WO 2005042919 | A1 | 20050512 | WO 2004-US35053 | | 20041021 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| AU 2004292954 | A1 | 20050609 | AU 2004-292954 | | 20041021 |
| CA 2546280 | A1 | 20050609 | CA 2004-2546280 | | 20041021 |
| EP 1682012 | A2 | 20060726 | EP 2004-796105 | | 20041021 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | | |
| BR 2004016042 | A | 20070102 | BR 2004-16042 | | 20041021 |
| CN 1901841 | A | 20070124 | CN 2004-80040402 | | 20041021 |
| JP 2007511508 | T | 20070510 | JP 2006-539538 | | 20041021 |
| MX 2006PA05510 | A | 20061214 | MX 2006-PA5510 | | 20060515 |
| KR 2007010115 | A | 20070122 | KR 2006-711237 | | 20060608 |
| PRIORITY APPLN. INFO.: | | | US 2003-520196P | P | 20031113 |
| | | | WO 2004-US35053 | W | 20041021 |

AB Disclosure is a formulation for coating a transdermal delivery device having a plurality of stratum corneum-piercing microprojections, the formulation including a biol. active agent and at least one viscosity-enhancing counterion. Preferably, the formulation has a viscosity in the range of about 20-200 cp. For example the coating containing 20% parathyroid hormone (PTH, the first 34 amino acids), 0.5% hydrochloride and 0.2% Tween 20 was coated on microprojections for delivery of PTH.

IT 77-86-1, Tromethamine 11096-26-7, EPO
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(coatings on transdermal delivery microprojections containing biol. active agents and viscosity-enhancing couterions from acids and bases)
RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L15 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:78076 HCAPLUS Full-text
DOCUMENT NUMBER: 142:151584
TITLE: Target biological material separation from mixtures using superparamagnetic polysaccharide matrices and formation of the superparamagnetic particles
INVENTOR(S): Marchessault, Robert H.; Shingel, Kirill; Ryan, Dominic; Llanes, Francisco; Coquoz, Didier G.; Vinson, Robert K.
PATENT ASSIGNEE(S): Can.
SOURCE: U.S. Pat. Appl. Publ., 29 pp., Cont.-in-part of U.S. Ser. No. 352,280.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 20050019755 | A1 | 20050127 | US 2004-765750 | 20040127 |
| US 20040146855 | A1 | 20040729 | US 2003-352280 | 20030127 |

PRIORITY APPLN. INFO.: US 2003-352280 A2 20030127

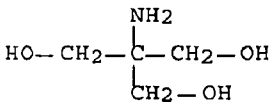
AB The present invention features a method for preparing superparamagnetic iron particles by the in situ formation of these particles in a cross-linked starch matrix or by the formation of a superparamagnetic chitosan material. The superparamagnetic materials are formed by mild oxidation of ferrous ion, either entrapped into a cross-linked starch matrix or as a chitosan-Fe(II) complex, with the mild oxidizing agent, nitrate, under alkaline conditions. The present invention further features superparamagnetic iron compns. prepared by the method of the invention. The compns. of the invention are useful for the separation, isolation, identification, or purification of biol. materials. Chitosan and FeCl2 were incubated to form a complex, the complex was treated with a solution of NH4OH and then oxidized with KNO3 to prepare superparamagnetic chitosan particles (MagChi). The particles were treated with glutaraldehyde and then reacted with protein A. Sodium cyanoborohydride solution was added to the reaction mixture and incubated overnight. The particles were magnetically separated from unreacted protein in the supernatant. Glycine and sodium cyanoborohydride solution were incubated with the particles for one hour. The resulting MagChi matrix modified by covalent

attachment to protein A (MagChi-Protein A) was used to magnetically bind IgG. The MagChi-Protein A matrix showed saturation binding at 2.5 mg of IgG/mg matrix and greater than 90% of the IgG bound could be recovered.

IT **11096-26-7P, Erythropoietin**
RL: ANT (Analyte); BSU (Biological study, unclassified); PUR (Purification or recovery); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)
(as target biol. material; target biol. material separation from mixts. using superparamagnetic polysaccharide matrixes and formation of superparamagnetic particles)
RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **77-86-1, Tris(hydroxymethyl)aminomethane**
RL: NUU (Other use, unclassified); USES (Uses)
(buffers; target biol. material separation from mixts. using superparamagnetic polysaccharide matrixes and formation of superparamagnetic particles)
RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1879 HCAPLUS Full-text
DOCUMENT NUMBER: 142:100377
TITLE: Formulations for coated microprojections containing non-volatile counterions
INVENTOR(S): Ameri, Mahmoud; Lin, Weiqi; Cormier, Michel J. N.; Maa, Yuh-Fun
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 25 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 20040265354 | A1 | 20041230 | US 2004-880702 | 20040629 |
| AU 2004255218 | A1 | 20050120 | AU 2004-255218 | 20040629 |
| CA 2530531 | A1 | 20050120 | CA 2004-2530531 | 20040629 |
| WO 2005004842 | A2 | 20050120 | WO 2004-US21004 | 20040629 |
| WO 2005004842 | A3 | 20050421 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,

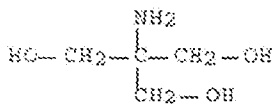
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | | |
|---|---|---|---|---|---|
| EP 1638523 | A2 | 20060329 | EP 2004-756422 | | 20040629 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | | |
| BR 2004012029 | A | 20060905 | BR 2004-12029 | | 20040629 |
| CN 1842320 | A | 20061004 | CN 2004-80024334 | | 20040629 |
| JP 2007527392 | T | 20070927 | JP 2006-518731 | | 20040629 |
| US 20050123507 | A1 | 20050609 | US 2005-34891 | | 20050112 |
| MX 2006PA00281 | A | 20060703 | MX 2006-PA281 | | 20060105 |
| PRIORITY APPLN. INFO.: | | | US 2003-484020P | P | 20030630 |
| | | | US 2003-484930P | P | 20030702 |
| | | | US 2004-880702 | A2 | 20040629 |
| | | | WO 2004-US21004 | W | 20040629 |

AB The invention provides for a formulation for coating one or more microprojections which reduces or minimizes the loss of counterions from the coating in order to achieve a pH-stabilized formulation. A composition for coating a transdermal delivery device having stratum corneum-piercing microprojections comprises a formulation of a biol. active agent and a non-volatile counterion, wherein the formulation has increased pH stability and solubility when dried. The biol. active agents include hormones and antigens.

IT **77-86-1**, Tromethamine **11096-26-7**, **Erythropoietin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(transdermal delivery systems using microprojections with drug-containing coating and counterions)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

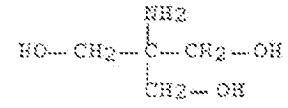
L15 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:817689 HCAPLUS Full-text
DOCUMENT NUMBER: 141:325783
TITLE: Use of compounds for the prevention of drug-induced cell toxicity
INVENTOR(S): Nykjaer, Anders
PATENT ASSIGNEE(S): Arhus Universitet, Den.; Recepticon Aps
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2004084876 | A2 | 20041007 | WO 2004-DK205 | | 20040325 |
| WO 2004084876 | A3 | 20041223 | | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| AU 2004224788 | A1 | 20041007 | AU 2004-224788 | | 20040325 |
| CA 2560522 | A1 | 20041007 | CA 2004-2560522 | | 20040325 |
| EP 1610773 | A2 | 20060104 | EP 2004-723168 | | 20040325 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | | |
| BR 2004008699 | A | 20060328 | BR 2004-8699 | | 20040325 |
| CN 1794982 | A | 20060628 | CN 2004-80014657 | | 20040325 |
| JP 2006520761 | T | 20060914 | JP 2006-504337 | | 20040325 |
| MX 2005PA10143 | A | 20060317 | MX 2005-PA10143 | | 20050922 |
| IN 2005CN02770 | A | 20070525 | IN 2005-CN2770 | | 20051026 |
| US 20070004727 | A1 | 20070104 | US 2006-550488 | | 20060821 |
| PRIORITY APPLN. INFO.: | | | DK 2003-459 | A | 20030326 |
| | | | WO 2004-DK205 | W | 20040325 |

AB The present invention relates to the use of compds. for the manufacture of a medicament for the prophylaxis and/or treatment of induced cell toxicity, such as nephrotoxicity and ototoxicity, in particular where the cell toxicity is induced by a medical treatment. In a preferred embodiment the compds. have at least two nitrogen atoms, more preferably at least two amino groups. The compds. according to the invention are capable of blocking binding of cell toxic compds. to the megalin receptor, and thereby inhibiting uptake of the cell toxic compds. into cells. The invention further relates to novel compds. for use in said treatment, as well as a method for reducing the cell toxicity of cell toxic compds.

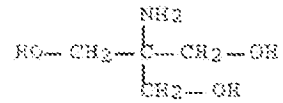
IT **77-86-1, Tromethamine 11096-26-7, Erythropoietin**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of compds. for prevention of drug-induced cell toxicity)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***



RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:532691 HCAPLUS Full-text
DOCUMENT NUMBER: 139:95435
TITLE: Modified receptors on cell membranes for the discovery of therapeutic ligands
INVENTOR(S): Schwartz, Thue W.; Martini, Lene; Heydorn, Arne; Jorgensen, Rasmus
PATENT ASSIGNEE(S): 7TM Pharma A/S, Den.
SOURCE: PCT Int. Appl., 122 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2003055914 | A2 | 20030710 | WO 2002-DK900 | | 20021220 |
| WO 2003055914 | A3 | 20031023 | | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | | |
| AU 2002358469 | A1 | 20030715 | AU 2002-358469 | | 20021220 |
| PRIORITY APPLN. INFO.: | | | DK 2001-1944 | A | 20011221 |
| | | | DK 2002-113 | A | 20020122 |
| | | | DK 2002-1043 | A | 20020703 |
| | | | US 2002-394122P | P | 20020703 |
| | | | WO 2002-DK900 | W | 20021220 |

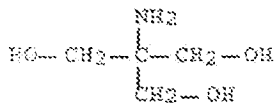
AB A drug discovery method is provided for selecting a compound selected from the group consisting of a small organic substance, a biopharmaceutical, or an antibody or part thereof. The method comprises the steps of (i) expressing one or more receptors on a cell membrane, such as, e.g., an exterior cell surface of a cell, (ii) contacting one or more expressed receptors with a test compound or a selection of test compds. (libraries), and (iii) selecting one or more compds. based on its ability to bind one or more receptors. The step of expressing the one or more receptors comprises capturing one or more receptors on the exterior cell surface in a conformation that predominantly

enables binding or interaction with a ligand, and the conformation that predominantly enables binding or interaction with a ligand is provided by modification of one or more receptors by a method comprising at least one of the following: (a) fusion with any protein which keeps the receptor in the desired conformation such as, e.g. an arrestin, a modified arrestin, a G-protein or a modified G-protein, (b) site-directed mutagenesis, and (c) deletion. The receptors may be captured on the exterior cell surface by at least one of the following: (d) interaction of the receptor with a scaffolding protein, optionally, with a scaffolding protein network and (e) means for blocking receptor internalization, e.g. by co-expression of a mutated dynamin or a modified arrestin or by use of chems. such as, e.g., sucrose and/or Tris. Thus, by coexpressing of either the wild-type receptor or by modifying the receptor by engineering for example a recognition motif for a strong binder into its structure (for example, a PDZ recognition motif at its C-terminal end), and coexpression of this with a scaffolding protein such as PSD-95 or a modified scaffolding protein which interacts with the cytoskeleton at the cell surface or is made to be closely associated with the membrane through a lipid anchor, a high level of surface expression can be ensured, which will benefit its use in the drug discovery process. As a result of the strong tendency of the scaffolding proteins to interact with each other, just the cotransfection with one or more appropriate scaffolding proteins or modified scaffolding protein may also lead to the formation of patches with high local concns of the receptor or modified receptor, which will be highly beneficial in the drug discovery process where they are used initially to select binding mols. The method is exemplified by expression of the NK1 receptor in an agonist high-affinity binding form at the surface of transfected cells through fusion with arrestin or the N-terminal fragment of arrestin.

IT **77-86-1**, Tris
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(impair receptor internalization in presence of; modified receptors on cell membranes for discovery of therapeutic ligands)

RN 77-86-1 HCAPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



L15 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:565238 HCAPLUS Full-text

DOCUMENT NUMBER: 135:157676

TITLE: Biodegradable compounds and protein polymers for slow-release drug delivery

INVENTOR(S): Rowe, Stephen C.; Yim, Kalvin; Retnarajan, Beadle P.; Hubbell, Jeffrey A.; Annavajula, Durga

PATENT ASSIGNEE(S): Infimed Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

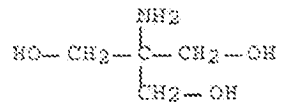
| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| WO 2001055360 | A1 | 20010802 | WO 2001-US2828 | | 20010129 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW | | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | | |
| CA 2398788 | A1 | 20010802 | CA 2001-2398788 | | 20010129 |
| US 20010048947 | A1 | 20011206 | US 2001-772174 | | 20010129 |
| US 6699504 | B2 | 20040302 | | | |
| EP 1255823 | A1 | 20021113 | EP 2001-946892 | | 20010129 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | | |
| JP 2003520810 | T | 20030708 | JP 2001-554391 | | 20010129 |
| BR 2001007942 | A | 20040106 | BR 2001-7942 | | 20010129 |
| CN 1606620 | A | 20050413 | CN 2001-806822 | | 20010129 |
| AU 785288 | B2 | 20061221 | AU 2001-29782 | | 20010129 |
| MX 2002PA07281 | A | 20021209 | MX 2002-PA7281 | | 20020726 |
| US 20040156914 | A1 | 20040812 | US 2003-650115 | | 20030826 |
| US 6939557 | B2 | 20050906 | | | |
| US 20060003009 | A1 | 20060105 | US 2005-212223 | | 20050826 |
| PRIORITY APPLN. INFO.: | | | US 2000-178852P | P | 20000128 |
| | | | US 2001-772174 | A1 | 20010129 |
| | | | WO 2001-US2828 | W | 20010129 |
| | | | US 2003-650115 | A1 | 20030826 |

AB The invention relates to biodegradable compns. for sustained-release drug delivery and methods for administering a biol. active substance via these compns. The invention provides methods and compns. for the administration of a biol. active substance (BAS) in an insol. format. The composition comprises a macromer, a mol. or mixture of mols. which preferentially excludes proteins, and the BAS. By macromer is meant a polymer with three components: (1) a biocompatible, water soluble region; (2) a biodegradable/hydrolyzable region, and (3) at least two polymerizable regions. Poly(ethylene glycol), hyaluronic acid and poly(vinylpyrrolidone) are used as the mols. which preferentially excludes proteins. The compns. of the invention improve the bioavailability of the BAS by formulating the BAS in an insol. format. These methods and compns. provide for the controlled, sustained delivery of relatively large quantities of these substances, with a low burst effect. The invention also features methods of treating an animal using the articles for delivery of a BAS.

IT **11096-26-7, Erythropoietin**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biodegradable compds. and protein polymers for slow-release drug delivery)
RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **77-86-1, Tris**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ion-carrier; biodegradable compds. and protein polymers for slow-release drug delivery)
RN 77-86-1 HCAPLUS

CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



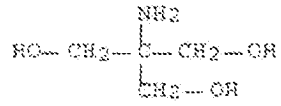
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:491203 HCAPLUS Full-text
DOCUMENT NUMBER: 135:221397
TITLE: Kinetic and thermodynamic analysis of thermal unfolding of recombinant **erythropoietin**
AUTHOR(S): Arakawa, Tsutomu; Philo, John S.; Kita, Yoshiko
CORPORATE SOURCE: Alliance Protein Laboratories, Thousand Oaks, CA, 91360, USA
SOURCE: Bioscience, Biotechnology, and Biochemistry (2001), 65(6), 1321-1327
CODEN: BBBIEJ; ISSN: 0916-8451
PUBLISHER: Japan Society for Bioscience, Biotechnology, and Agrochemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Thermal stress was used to assess the stability of recombinant human **erythropoietin** (EPO) derived from Chinese hamster ovary cells. In 20 mM phosphate at pH 7.0, this protein had a highly reversible thermal unfolding as observed by far UV CD and native gel anal., with no indication of protein aggregation. It had a relatively low melting temperature at 53°. Assuming a two-state transition, the observed reversibility permits thermodn. anal. of the unfolding of EPO, which shows that the free energy of unfolding at 25° is only 6-7 kcal/mol. Upon heating to 79° over 30 min, however, this protein does undergo aggregation as assessed by native gel. In 20 mM phosphate and citrate at pH 7.0, the results are similar, i.e., EPO suffered a substantial aggregation, while it showed little aggregation in 20 mM Tris or histidine at pH 7.0 and 20 mM glycine at pH 6.3 under identical heat treatment.

IT **77-86-1**, Tris
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(buffers effect on kinetics and thermodn. anal. of thermal unfolding of **erythropoietin**)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



IT **11096-26-7**, **Erythropoietin**

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(recombinant human; kinetics and thermodn. anal. of thermal unfolding of **erythropoietin**)
RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:758900 HCAPLUS Full-text
DOCUMENT NUMBER: 126:15184
TITLE: Process for purification of glycoproteins like **erythropoietin**
INVENTOR(S): Zanette, Dino; Sarubbi, Edoardo Giacomo; Soffientini, Adolfo; Restelli, Ermenegildo; Grigoletto, Armando
PATENT ASSIGNEE(S): Gruppo Lepetit S.P.A., Italy
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

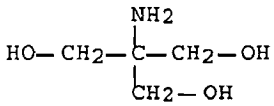
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9632413 | A1 | 19961017 | WO 1996-EP1509 | 19960409 |
| W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, SD, SG, SI, SK, TR, UA, US, UZ, VN, AM, AZ, BY, KZ, RU, TJ, TM | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| IL 117849 | A | 20020725 | IL 1996-117849 | 19960408 |
| CA 2216130 | A1 | 19961017 | CA 1996-2216130 | 19960409 |
| AU 9656457 | A | 19961030 | AU 1996-56457 | 19960409 |
| AU 693693 | B2 | 19980702 | | |
| EP 820468 | A1 | 19980128 | EP 1996-913491 | 19960409 |
| EP 820468 | B1 | 20000628 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI | | | | |
| CN 1181759 | A | 19980513 | CN 1996-193298 | 19960409 |
| HU 9802038 | A2 | 19981228 | HU 1998-2038 | 19960409 |
| HU 9802038 | A3 | 20010129 | | |
| HU 225591 | B1 | 20070502 | | |
| JP 11503726 | T | 19990330 | JP 1996-530698 | 19960409 |
| JP 3998156 | B2 | 20071024 | | |
| AT 194144 | T | 20000715 | AT 1996-913491 | 19960409 |
| ES 2147647 | T3 | 20000916 | ES 1996-913491 | 19960409 |
| PT 820468 | T | 20001130 | PT 1996-913491 | 19960409 |
| CZ 291770 | B6 | 20030514 | CZ 1997-3256 | 19960409 |
| ZA 9602914 | A | 19961017 | ZA 1996-2914 | 19960412 |
| TW 421652 | B | 20010211 | TW 1996-85104363 | 19960412 |
| US 5981716 | A | 19991109 | US 1997-898014 | 19970722 |
| NO 9704524 | A | 19970930 | NO 1997-4524 | 19970930 |
| NO 317188 | B1 | 20040913 | | |

GR 3034294 T3 20001229 GR 2000-401981 20000831
PRIORITY APPLN. INFO.: EP 1995-200945 A 19950414
US 1995-475260 A 19950607
EP 1996-913491 A 19960409
WO 1996-EP1509 W 19960409

AB The present invention is directed to a simple and efficient process for the recovery of a biol. active glycoprotein from a biol. fluid containing it. It includes a Ph boronate chromatog. step and is particularly suitable for the purification of **erythropoietin.** **Erythropoietin** can be purified by applying a semipurified material containing **erythropoietin** to a dihydroxboronyl chromatog. matrix preequilibrated with a 1st equilibrating buffer, washing with the equilibrating buffer, and eluting with an aqueous buffer having a pH between 7.5-11 containing a compound having 1-hydroxy-2-amino groups and a 1,2-cis-diol containing low-mol.-weight substance.

IT **77-86-1**
RL: NUU (Other use, unclassified); USES (Uses)
(buffer containing; **erythropoietin** chromatog. purification and eluting buffers therefor)

RN 77-86-1 HCAPLUS
CN 1,3-Propanediol, 2-amino-2-(hydroxymethyl)- (CA INDEX NAME)



IT **11096-26-7P, Erythropoietin**
RL: PUR (Purification or recovery); PREP (Preparation)
(**erythropoietin** chromatog. purification and eluting buffers therefor)

RN 11096-26-7 HCAPLUS
CN Erythropoietin (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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L2 2283 SEA FILE=REGISTRY ABB=ON PLU=ON ERYTHROPOIETIN? NOT L1
L3 1 SEA FILE=REGISTRY ABB=ON PLU=ON THAM/CN
L4 SEL PLU=ON L1 1- CHEM : 9 TERMS
L5 47045 SEA FILE=HCAPLUS ABB=ON PLU=ON L4
L6 47188 SEA FILE=HCAPLUS ABB=ON PLU=ON L5 OR L2 OR ERYTHROPOIETIN OR EPO
L7 SEL PLU=ON L3 1- CHEM : 53 TERMS
L8 138363 SEA FILE=HCAPLUS ABB=ON PLU=ON L7
L9 138382 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR THAM OR TRISHYDROXYMETHYLAMINOMETHANE OR TRIS?(A)HYDROXY?(A)METHYL?(A)AMINO?(A)METHAN?
L10 159 SEA FILE=HCAPLUS ABB=ON PLU=ON L6(L)L9
L11 3585784 SEA FILE=HCAPLUS ABB=ON PLU=ON (SOLUTION/CV OR DISSOLUTION/CV) OR ?SOLUTION?
L12 37 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND L11
L13 14931 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR ERYTHROPOIETIN?
L14 6724 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 OR TRISHYDROXYMETHYLAMINOMETHANE?

L15 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND L14
L17 37 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND L12
L18 36 SEA FILE=HCAPLUS ABB=ON PLU=ON L17 NOT L15

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=> d ibib abs hitstr l18 1-36

L18 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:388532 HCAPLUS Full-text
DOCUMENT NUMBER: 147:533579
TITLE: Study on the π-π stacking effect of triphenyl corrole and its copper complexes
AUTHOR(S): Liu, Hai-Yang; Guo, Ping-Ye; Xu, Zhi-Guang; Ying, Xiao; Jiang, Huan-Feng; Chang, Chi-Kwong
CORPORATE SOURCE: Department of Chemistry, South China University of Technology, Guangzhou, 510641, Peop. Rep. China
SOURCE: Wuji Huaxue Xuebao (2007), 23(3), 504-508
CODEN: WHUXEO; ISSN: 1001-4861
PUBLISHER: Wuji Huaxue Xuebao Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Aggregation behavior of 5,10,15-**tris**(pentafluorophenyl)corrole (F15TPC), 5,10,15,20-tetrakis(pentafluorophenyl)porphyrin (F20TPP), and their copper complexes in DCM **solution** were investigated by using UV-vis spectroscopic method. F20TPP and F20TPPCu exhibited strong π-π stacking interactions in DCM, and the intermol. dimerization consts. turned out to be 1.82 × 103 and 17.2 × 103 L/mol-1, resp. However, extinction coeffs. of F15TPC and F15TPCCu at soret band remained unchanged with increasing in their concns. from 1.0 to 40.0 μmol/L-1, indicating they remained monomeric in DCM **solution** Based on DFT calcn. and the π-π stacking geometries observed in crystal structures of metal octaethylcorrole complexes, destroy of π-π interactions in F15TPC and F15TPCCu may be understood by the electrostatic potential surfaces (**EPS**) features of the mols. and steric repulsions caused by the introducing of three Ph at the meso- positions of corrole macrocycle.

L18 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:294864 HCAPLUS Full-text
TITLE: Ga(III), In(III) and Fe(III) complexes of a new N -functionalized macrocyclic chelator with 3-hydroxy-4-pyrone chelating arms
AUTHOR(S): Sreerama, Subramanya G.; Hsieh, Wen-Yuan; Liu, Shuang
CORPORATE SOURCE: School of Health Sciences, Purdue University, West Lafayette, IN, 47907, USA
SOURCE: Abstracts of Papers, 233rd ACS National Meeting, Chicago, IL, United States, March 25-29, 2007 (2007), INOR-736. American Chemical Society: Washington, D. C.
CODEN: 69JAUY
DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)
LANGUAGE: English
AB A new macrocyclic chelator, 1,4,7-**tris**[methylene-(3-hydroxy-6- hydroxymethyl-4-pyrone)]-1,4,7-triazacyclononane (H3L), was synthesized from the reaction of one equiv of 1,4,7-triazacyclononane (TACN) and three equiv of kojic acid in

the presence of excess formaldehyde. The reaction of H3L with trivalent metal ions offered neutral complexes ML (M = Ga, In and Fe). H3L and its complexes ML (M = Ga, In and Fe) have been characterized by elemental anal., IR, UV/vis, ESI-MS, NMR and electrochem. method. Solid state structures of GaL and FeL are almost identical and isostructural. The coordination geometry around the metal ion is best described as distorted octahedron with a twist angle .apprx. 59-. FeL is redox active and displays a quasi reversible reduction at E1/2 = -525mV with ΔEp = 73 mV. Variable 1H NMR data showed that the **solution** structure of both GaL and InL is rigid without any fluxionality even at temperature as high as 65°C as evidenced by the presence of AB quartets from methylene hydrogens of the TACN backbone. Studies of their thermodn. stability by potentiometric titration are still in progress.

L18 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1296279 HCAPLUS Full-text
DOCUMENT NUMBER: 146:158443
TITLE: HEPES-Stabilized Encapsulation of Salmonella typhimurium
AUTHOR(S): Suo, Zhiyong; Yang, Xinghong; Avci, Recep; Kellerman, Laura; Pascual, David W.; Fries, Marc; Steele, Andrew
CORPORATE SOURCE: Imaging and Chemical Analysis Laboratory, Department of Physics, Montana State University, Bozeman, MT, 59717, USA
SOURCE: Langmuir (2007), 23(3), 1365-1374
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Most bacteria, planktonic and sessile, are encapsulated inside loosely bound extracellular polymeric substance (**EPS**) in their physiol. environment. Imaging a bacterium with its capsule requires lengthy sample preparation to enhance the capsular contrast. In this study, Salmonella typhimurium was investigated using atomic force microscopy for a practical means of imaging an encapsulated bacterium in air. The investigation further aimed to determine the relation between the buffers used for preparing the bacterium and the preservation of the capsular material surrounding it. It was observed that rinsing bacteria with HEPES buffer could stabilize and promote capsule formation, while rinsing with PBS, **Tris**, or glycine removes most of the capsular **EPS**. For bacteria rinsed with HEPES and air-dried, the height images showed only the contour of the capsular material, while the phase and amplitude images presented the detailed structures of the bacterial surface, including the flagella encapsulated inside the capsular **EPS**. The encapsulation was attributed to the crosslinking of the acidic exopolysaccharides mediated by the piperazine moiety of HEPES through electrostatic attraction. This explanation is supported by encapsulated bacteria observed for samples rinsed with N,N'-bis(2-hydroxyethyl)-piperazine **solution** and by the presence of entrapped HEPES within the dry capsular **EPS** suggested by micro-Raman spectroscopy.
REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:382970 HCAPLUS Full-text
DOCUMENT NUMBER: 144:413641
TITLE: One-pot thermoset epoxy resin compositions for gasohole-fueled automobile parts
INVENTOR(S): Asai, Daijiro

PATENT ASSIGNEE(S): Aica Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2006111800 | A | 20060427 | JP 2004-302685 | 20041018 |

PRIORITY APPLN. INFO.: JP 2004-302685 20041018

AB The compns. with good gasohole (gasoline-alc. blend) fuel resistance contain (A) epoxides, (B) curing agent compns. prepared by reacting amines with epoxides, and (C) fillers. Thus, 0.72 mol Adeka **EP** 4100 (liquid bisphenool A diglycidyl ether epoxy resin) was added dropwise to a MEK **solution** containing 2-ethyl-4-methylimidazole 1, 2,4,6- **tris**(dimethylaminomethyl)phenol 0.1, and N,N-dimethylaminopropylamine 0.1 mol, stirred while refluxing, treated under decreased pressure for MEK removal, cooled to give a fine yellow solid, and pulverized to give a hardener composition, 40 parts of which was mixed with Adeka **EP** 4100 100, diisodecyl adipate 6, and Whiton SB 40 parts to give a 1-pot curable composition with gel time at 90° 7 min, good storage stability, and high shear adhesion when bonding SPCC-SD sheets.

L18 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:252223 HCAPLUS Full-text
DOCUMENT NUMBER: 145:309739
TITLE: Study on the interaction of bovine serum albumin with acid cyanine 5R and its application in analysis
AUTHOR(S): Lu, Fei; Pan, Jing-Hao; Liu, Yun; Zhang, Hongfen; Guo, Yujing; Wang, Yingte
CORPORATE SOURCE: Chemistry Department, School of Chemistry and Chemical Engineering, Shanxi University, Taiyuan, 030006, Peop. Rep. China
SOURCE: Biochemistry and Cell Biology (2006), 84(1), 1-8
CODEN: BCBIEQ; ISSN: 0829-8211
PUBLISHER: National Research Council of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A supramol. complex of bovine serum albumin (BSA) with acid cyanine 5R (AC 5R, C.I. acid blue 113, C.I.: 26360) has been shown to form in Tris-HCl buffer **solution** (pH 7.42) by linear sweep voltammetry (LSV), fluorometry, and spectrophotometry. The binding ratio and binding constant of BSA with AC 5R have been detected by LSV and fluorometry. The binding mechanism is also preliminarily discussed. In Tris-HCl buffer **solution** (pH 7.42), AC 5R can easily be reduced on the mercury electrode, and it has a well-defined LSV peak current (Ip) and peak potential (**Ep**) at -0.65 V (vs. SCE). In the presence of BSA, the Ip of AC 5R decreases, and the peak potential (**Ep**) shifts to a more pos. potential. The decrease of the second-order derivative of reductive peak current (ΔI''p) of AC 5R is proportional to the logarithm of BSA concentration in the range of 1.54×10-8 mol·L-1 - 1.54×10-5 mol·L-1 (r = 0.9931-0.9977). The limit of detection of BSA is 9.0×10-9 mol·L-1. The relative standard deviation is 1.83% (n = 10), and the standard recovery is 97.5%-104.8%. This method can be used to determine BSA concentration on the basis of the of BSA with AC 5R.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:652823 HCAPLUS Full-text
DOCUMENT NUMBER: 141:273815
TITLE: Separation and investigation of structure-mobility relationships of insect oostatic peptides by capillary zone electrophoresis
AUTHOR(S): Solinova, Veronika; Kasicka, Vaclav; Koval, Dusan; Hlavacek, Jan
CORPORATE SOURCE: Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, Czech Rep.
SOURCE: Electrophoresis (2004), 25(14), 2299-2308
CODEN: ELCTDN; ISSN: 0173-0835
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Capillary zone electrophoresis (CZE) has been applied to qual. anal., separation, and physicochem. characterization of synthetic insect oostatic peptides (IOPs) and their derivs. and fragments. Series of homologous IOPs were separated in three acidic background electrolytes (BGEs; pH 2.25, 2.30, 2.40) and an alkaline BGE (pH 8.1). Best separation was achieved in acid BGE composed of 100 mM H3PO4, 50 mM Tris, pH 2.25. The effective electrophoretic mobilities, μep, of all IOPs in four BGEs were determined and several semiempirical models correlating effective mobility with charge-to-size ratio (μep vs. q/Mrk) were tested to describe the migration behavior of IOP in CZE. None of models was found to be unambiguously applicable for the whole set of 20 IOPs differing in size (dipeptide - decapeptide) and charge (-2 to +0.77 elementary charges). However, a high coefficient of correlation, 0.9993, was found for the subset of homologous series of IOPs with decreasing number of proline residues at C-terminus, H-Tyr-Asp-Pro-Ala-Prox-OH, x = 6-0, for the dependence of μep on q/Mrk with k = 0.5 for IOPs as anions in alkaline BGE and with k = 2/3 for IOPs as cations in optimized acidic Tris-phosphate BGE. From these dependences the probable structure of IOPs in solution could be predicted.
REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:240484 HCAPLUS Full-text
DOCUMENT NUMBER: 141:16265
TITLE: Coupled electron-transfer and spin-exchange reactions of metal-bis[tris(pyrazolyl)methane] complexes
AUTHOR(S): Sheets, Josie R.; Schultz, Franklin A.
CORPORATE SOURCE: Department of Chemistry, Indiana University-Purdue University Indianapolis, Indianapolis, IN, 46202-3274, USA
SOURCE: Polyhedron (2004), 23(6), 1037-1043
CODEN: PLYHDE; ISSN: 0277-5387
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:16265
AB Coupled electron-transfer and spin-exchange reactions of metal(II)-bis[tris(pyrazolyl)methane] complexes, [M(tpm)2]2+, with M = Mn, Fe, Co, or Ni and tpm = HC(pz)3 or HC(3,5-Me2pz)3, are reported. Apparent heterogeneous electron-transfer rate consts., (ks,h)app, for [M(tpm)2]2+ to [M(tpm)2]3+ oxidns. are determined from the scan rate dependence of cyclic voltammetric peak potential sepns., ΔEp. Consistent with the expectation that electron-

transfer reactions that are accompanied by a change in spin-state are slower than those that are not, (ks,h)app for oxidation of high-spin (HS) {Fe[HC(3,5-Me2pz)3]2}2+ to low-spin (LS) {Fe[HC(3,5-Me2pz)3]2}3+ is 10 times smaller than the value for oxidation of predominantly LS {Fe[HC(pz)3]2}2+ to LS {Fe[HC(pz)3]2}3+. Very small values of (ks,h)app are observed for the 1-electron oxidns. of HS {Co[HC(pz)3]2}2+ and HS {Mn[HC(3,5-Me2pz)3]2}2+. The electrochem., magnetic, and spectroscopic properties of [M(tpm)2]2+ complexes are similar to those of the corresponding tris(pyrazolyl)borate (pzb-) complexes with the exception that, because of net charge considerations, the M(III/II) potential is .apprx.1 V more pos. for [M(tpm)2]3+/2+ than for [M(pzb)2]+/0 couples. The stability of [M(tpm)2]2+ complexes in MeCN and DMF solution was studied by pos. ion electrospray ionization mass spectrometry. {Fe[HC(pz)3]2}2+ undergoes ligand dissociation in DMF.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:27591 HCAPLUS Full-text
DOCUMENT NUMBER: 141:94881
TITLE: Extraction of palladium from nitric acid solutions with tris[(diphenylphosphinothioyl)methyl]ethylmethane
AUTHOR(S): Turanov, A. N.; Karandashev, V. K.; Baulin, V. E.
CORPORATE SOURCE: Inst. Fiz. Tverdogo Tela, RAN, Chernogolovka, Russia
SOURCE: Zhurnal Neorganicheskoi Khimii (2003), 48(11), 1917-1920
CODEN: ZNOKAQ; ISSN: 0044-457X
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: Russian

AB The palladium(2+) distribution was studied between nitric acid aqueous solns. and the solution of the new;y prepared ethyl-tris[(diphenylthiophosphinyl)methyl]methane (L) in methylene chloride. The cation transfers into organic phase as a complex of the 1:1 stoichiometry. The ion selectivity is observed during extraction with a macroporous polymer sorbent impregnated with L. A comparison was made with the solvent extraction of palladium and other metals with tripenylphosphine sulfide (Ph3PS).

L18 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:863029 HCAPLUS Full-text
DOCUMENT NUMBER: 139:331900
TITLE: Field amplified sample injection of cationic and anionic ions at positive voltage capillary electrophoresis using tris(2,2'-bipyridyl)ruthenium(II) electrochemiluminescence detection system
AUTHOR(S): Liu, Ji-Feng; Yang, Xiu-Rong; Wang, Er-Kang
CORPORATE SOURCE: State Key Laboratory of Electroanalytical Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, 130022, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (2003), 24(10), 1798-1800
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The field-amplified sample injection behavior of cationic tripropylamine (TPA) and anionic proline (Pro) at a pos. voltage in capillary electrophoresis with **tris**(2,2'-bipyridyl)ruthenium(II) electrochemiluminescence (ECL) detection system was studied. In the case of TPA, where the sample **solution** was prepared in pure water, ECL sensitivity can be improved by 100 times compared to conventional electroinjection method when a pos. voltage was applied. Under the same pos. voltage condition, anionic Pro prepared in electrolyte **solution** can also be injected and concentrated in the column when a water plug was injected before sample introduction. The sensitivity and efficiency were. enhanced by 10 and 46 times, resp. The behavior of cationic TPA can be explained by conventional field amplified sample injection (FASI) theory. When the ratio of resistivities of sample matrix to that of separation buffer is less than 1 (γ«1), the conventional FASI theory can also be used to explain the improved sensitivity and theor. plates of Pro. The sensitivity, plate, velocity (υep), amplified factor (υep/υep0) and peak variance (σ2) of Pro reach maximum at optimized water plug length and buffer concentration of the sample matrix.

L18 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:560472 HCAPLUS Full-text
DOCUMENT NUMBER: 139:302159
TITLE: Electrochemical behavior of epinephrine at deoxyribonucleic acid-modified gold electrodes and influence of lead ion
AUTHOR(S): Tang, Ping; Zeng, Baizhao
CORPORATE SOURCE: College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, 430072, Peop. Rep. China
SOURCE: Fenxi Huaxue (2003), 31(6), 641-645
CODEN: FHHHDT; ISSN: 0253-3820
PUBLISHER: Kexue Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB DNA modified gold electrodes were prepared by the dry adsorptive method. At these electrodes, the electrochem. behavior of epinephrine (**EP**) and the influence of lead ion were studied by cyclic voltammetry, chronocoulometry, differential pulse voltammetry, alternating impedance and UV spectrometry. It was found that in 5 mmol/L **Tris** butter **solns.** (pH 7.7) at DNA/Au electrode epinephrine exhibited an irreversible anodic peak (**Ep** = 0.16 V). This peak was at more pos. potential and was more sensitive compared with that at bare gold electrodes produced by epinephrine (**Ep** = 0.11 V). In the presence of Pb2+ the peak shifted toward neg. and the peak height increased. Even more, the peak height was linear to **EP** concentration over the range of 0.5.apprx.75 μmol/L. The electrode process was also studied. When there was no Pb2+ the **EP** could interact with DNA through intercalating in the double spiral of DNA in addition to electrostatic attraction. In the presence of Pb2+ there were two forms of combinations, i.e. the intercalation of **EP**-Pb2+ in the double spiral of DNA and electrostatic attraction between DNA and **EP**/**EP**-Pb2+.

L18 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:428974 HCAPLUS Full-text
DOCUMENT NUMBER: 139:67756
TITLE: Kit for detecting antibodies to encephalomyelitis virus in poultry
INVENTOR(S): Borisov, A. V.; Kuznetsov, V. N.; Gusev, A. A.; Irza, V. N.; Belyaeva, N. V.; Krest'yaninova, S. K.; Men'shchikova, A. E.

PATENT ASSIGNEE(S): Federal'noe Gosudarstvennoe Uchrezhdenie Vserossiiskii Nauchno-Issledovatel'skii Institut Zashchity Zhivotnykh, Russia
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| RU 2199126 | C2 | 20030220 | RU 2001-105771 | 20010302 |

PRIORITY APPLN. INFO.: RU 2001-105771 20010302

AB The disclosed kit contains the purified and inactivated antigen of the poultry encephalomyelitis virus (EP) immobilized on the solid carrier, dry pos. chicken blood serum to EP virus, dry neg. chicken blood serum, and dry anti-specific immunoperoxidase conjugate against chicken Igs, addnl. containing carboxyl-containing cationite KB-4P-2. Every component and cationite KB-4P-2 are applied at the following ratio, %: 2:98-15:85. Of the nonspecific components the disclosed kit contains **tris buffer solution**, phosphate-citrate buffer, orthophenylene diamine dyestuff or 2,2-azino-di [3-ethyl] benzthiazolinesulfonic acid, **solution** to stop reaction dyeing process, detergent twin-20, and the washing **solution** The disclosed kit is highly active, specific, of low cost, and is highly stable during storage.

L18 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:114299 HCAPLUS Full-text
DOCUMENT NUMBER: 138:313351
TITLE: Dioxo-Bridged Dinuclear Manganese(III) and -(IV) Complexes of Pyridyl Donor Tripod Ligands: Combined Effects of Steric Substitution and Chelate Ring Size Variations on Structural, Spectroscopic, and Electrochemical Properties
AUTHOR(S): Gultneh, Yilma; Yisgedu, Teshome B.; Tesema, Yohannes T.; Butcher, Ray J.
CORPORATE SOURCE: Department of Chemistry, Howard University, Washington, DC, 20059, USA
SOURCE: Inorganic Chemistry (2003), 42(6), 1857-1867
CODEN: INOCAJ; ISSN: 0020-1669
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:313351

AB The syntheses and structural, spectral, and electrochem. characterization of the dioxo-bridged dinuclear Mn(III) complexes [LMn(μ-O)2MnL](ClO4)2, of the tripodal ligands **tris**(6-methyl-2-pyridylmethyl)amine (L1) and bis(6-methyl-2-pyridylmethyl)(2-(2-pyridyl)ethyl)amine (L2), and the Mn(II) complex of bis(2-(2-pyridyl)ethyl)(6-methyl-2-pyridylmethyl)amine (L3) are described. Addition of aqueous H2O2 to MeOH **solns.** of the Mn(II) complexes of L1 and L2 produced green **solns.** in a fast reaction from which subsequently precipitated brown solids of the dioxo-bridged dinuclear (1) and (2), resp., which have the general formula [LMnIII(μ- O)2MnIIIL](ClO4)2. Addition of 30% aqueous H2O2 to the MeOH **solution** of the Mn(II) complex of L3 ([MnIIL3(MeCN)(H2O)](ClO4)2 (3)) showed a very sluggish change gradually precipitating an insol. black gummy solid, but no dioxo-bridged Mn complex is produced. By contrast, the Mn(II) complex of the ligand bis(2-(2-pyridyl)ethyl)(2-pyridylmethyl)amine (L3a) is

reported to react with aqueous H2O2 to form the dioxo-bridged MnIIIMnIV complex. In cyclic voltammetric expts. in MeCN **solution**, 1 shows two reversible peaks at E1/2 = 0.87 and 1.70 V (vs. Ag/AgCl) assigned to the MnIII2 ↔ MnIIIMnIV and the MnIIIMnIV ↔ MnIV2 processes, resp. 2 Also shows two reversible peaks, one at E1/2 = 0.78 V and a 2nd peak at E1/2 = 1.58 V (vs. Ag/AgCl) assigned to the MnIII2 ↔ MnIIIMnIV and MnIIIMnIV ↔ MnIV2 redox processes, resp. These potentials are the highest so far observed for the dioxo-bridged dinuclear Mn complexes of the type of tripodal ligands used here. The bulk electrolytic oxidation of complexes 1 and 2, at a controlled anodic potential of 1.98 V (vs. Ag/AgCl), produced the green MnIV2 complexes that were spectrally characterized. The Mn(II) complex of L3 shows a quasi reversible peak at an anodic potential of **Ep**,a of 1.96 V (vs. Ag/AgCl) assigned to the oxidation Mn(II) to Mn(III) complex. It is .apprx.0.17 V higher than the **Ep**,a of the Mn(II) complex of L3a. The higher oxidation potential is attributable to the steric effect of the Me substituent at the 6-position of the pyridyl donor of L3.

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:860443 HCAPLUS Full-text
DOCUMENT NUMBER: 134:147897
TITLE: Continuous **solution** copolymerization of ethylene with propylene using a constrained geometry catalyst system
AUTHOR(S): Park, Shinjoon; Wang, Wen-Jun; Zhu, Shiping
CORPORATE SOURCE: Department of Chemical Engineering, McMaster University, Hamilton, ON, L8S 4L7, Can.
SOURCE: Macromolecular Chemistry and Physics (2000), 201(16), 2203-2209
CODEN: MCHPES; ISSN: 1022-1352
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ethylene (E)/propylene (P) continuous **solution** copolymn. using the constrained geometry catalyst system, [CpMe4(SiMe2NtBu)]TiMe2 (CGC)/**tris**(pentafluorophenyl)boron/modified methylaluminoxane, was carried out at 3.45 × 103 kPa and 130, 140, and 150°C. Ethylene and propylene copolymers with a broad range of composition fractions were synthesized and characterized. The incorporation of propylene lowered the catalyst activity and increased chain termination reactions. The estimated reactivity ratios rE and rP were 2.89 and 0.324 at 130°C, 4.33 and 0.377 at 140°C, and 6.36 and 0.436 at 150°C, resp. The relatively low rE and high rP values of CGC compared to other metallocene systems indicated a ready incorporation of propylene in ethylene/propylene copolymn. The activation energies ΔEE and ΔEP were 56 and 21 kJ/mol, showing a more significant effect of polymerization temperature on rE than on rP. The reactivity ratios for normal propylene, inverted propylene, and ethylene were also estimated from the methylene sequence distributions.

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:197980 HCAPLUS Full-text
DOCUMENT NUMBER: 132:227484
TITLE: Aqueous formulations of biologically active polypeptides

INVENTOR(S): Papadimitriou, Apollon
PATENT ASSIGNEE(S): Hoffmann-La Roche, A.-G., Switz.
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2000086532 | A | 20000328 | JP 1999-248013 | 19990901 |
| JP 3664373 | B2 | 20050622 | | |
| TW 570805 | B | 20040111 | TW 1999-88114073 | 19990818 |
| EP 1002547 | A1 | 20000524 | EP 1999-116537 | 19990824 |
| EP 1002547 | B1 | 20060301 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY | | | | |
| AT 318616 | T | 20060315 | AT 1999-116537 | 19990824 |
| ES 2258830 | T3 | 20060901 | ES 1999-116537 | 19990824 |
| CN 1250669 | A | 20000419 | CN 1999-119245 | 19990827 |
| NZ 337527 | A | 20001222 | NZ 1999-337527 | 19990827 |
| SG 85670 | A1 | 20020115 | SG 1999-4209 | 19990827 |
| KR 2000022777 | A | 20000425 | KR 1999-36053 | 19990828 |
| IN 1999MA00858 | A | 20050304 | IN 1999-MA858 | 19990830 |
| NO 9904214 | A | 20000302 | NO 1999-4214 | 19990831 |
| AU 9944866 | A | 20000316 | AU 1999-44866 | 19990831 |
| AU 755930 | B2 | 20030102 | | |
| TR 9902103 | A2 | 20000421 | TR 1999-2103 | 19990831 |
| HR 990272 | A1 | 20000630 | HR 1999-272 | 19990831 |
| HR 990272 | B1 | 20061130 | | |
| ZA 9905601 | A | 20000927 | ZA 1999-5601 | 19990831 |
| MX 9908037 | A | 20000930 | MX 1999-8037 | 19990831 |
| RU 2180855 | C2 | 20020327 | RU 1999-118890 | 19990831 |
| HU 9902952 | A1 | 20000628 | HU 1999-2952 | 19990901 |
| BR 9903984 | A | 20010313 | BR 1999-3984 | 19990901 |
| PL 194218 | B1 | 20070531 | PL 1999-335203 | 19990901 |
| US 20020028766 | A1 | 20020307 | US 2001-953721 | 20010917 |
| US 6867182 | B2 | 20050315 | | |
| US 20050123610 | A1 | 20050609 | US 2005-32492 | 20050110 |
| US 20080064854 | A1 | 20080313 | US 2007-931118 | 20071031 |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| EP 1998-116494 | A | 19980901 |
| US 1999-385404 | A3 | 19990830 |
| US 2001-953721 | A1 | 20010917 |
| US 2005-32492 | A1 | 20050110 |

AB This invention relates to drug delivery systems of polypeptides with improved solubility Pharmacol. active polypeptides selected from the group consisting of hedgehog proteins, osteogenic factors, growth factors, **erythropoietin**, thrombopoietin, G-CSF, interleukins, and interferons, are combined with amphipathic substances to form ionic complexes in formulating aqueous compns. α-Interferon in **Tris buffer** (pH 7.4) was dialyzed in a **solution** containing deoxycholic acid and phosphatidylserine and formulated with a **solution** containing NaCl, Na phosphate buffer **solution** and deoxycholic acid for injection.

L18 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:164664 HCAPLUS Full-text

DOCUMENT NUMBER: 132:161693
TITLE: Preparation of human erythropoietin by cultivating transgenic mammalian cells in modified cell culture medium
INVENTOR(S): Lou, Dan; Xu, Liping; Zou, Zhongcheng
PATENT ASSIGNEE(S): Shenyang Sansheng Pharmaceutical Incorporated Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| CN 1190130 | A | 19980812 | CN 1998-100248 | 19980119 |

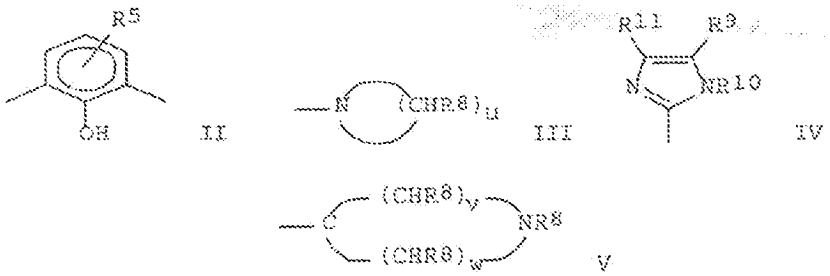
PRIORITY APPLN. INFO.: CN 1998-100248 19980119

AB Described is an improved method for producing human **erythropoietin** (**EPO**) by cultivating transgenic mammalian cells expressing the human **EPO**-encoding sequence in the modified DMEM culture medium, followed by purification The DMEM culture is modified by adding insulin 1 nM-10 mM, transferrin 0.1-100 nM, Se 1-1,000 ppm, glucose 1-10 g/L, and NaHCO3 2-4 g/L. The **EPO** in the medium can be purified by affinity column chromatog., ion exchange column chromatog., reversed phase liquid chromatog., and gel filtration. In affinity chromatog., the column is eluted with 20 mM **Tris**-HCl buffer **solution** containing 0-2 M NaCl gradient. In ion exchange column chromatog., the column is eluted with 0-1 M NaCl gradient. In reversed phase liquid chromatog., the column is eluted with 10- 70% (volume/volume) acetonitrile. In gel filtration, the column is eluted with 10-40 mM citrate buffer **solution** to obtain 100% pure human **EPO**.

L18 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:156846 HCAPLUS Full-text
DOCUMENT NUMBER: 130:239209
TITLE: Granular detergent compositions with good stability of peroxy compounds and amylase during storage for automatic dishwashers
INVENTOR(S): Okano, Tomomichi; Nishida, Shigeo; Yamamoto, Nobuyuki; Kubozono, Takayasu
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 11061187 | A | 19990305 | JP 1997-239019 | 19970820 |

PRIORITY APPLN. INFO.: JP 1997-239019 19970820
OTHER SOURCE(S): MARPAT 130:239209
GI

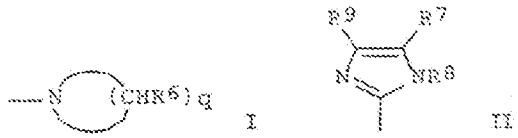


AB Title compns. having low angle of repose, contain (a) peroxy compds. generating H2O2 in aqueous **solns**, (b) amylases, (c) nonionic surfactants, (d) inorg. compds. with oil absorption (JIS K 6220) ≥100 mL/100 g, (e) ligands [A(CHR1)n]2N(CHR3)pXr(CHR4)qN[(CHR2)mB]2 or I [X = CR3(OH), NR5, O, II; Y = CR5OH, NR5; A, B = NR6R7, QR8t, N:CR6R7, III, IV, V; Q = pyridyl; R1-5, R15, R16 = H, (substituted) alkyl, cycloalkyl, or aryl; R6-11 = H, OH, (substituted) alkyl, cycloalkyl, aryl; R8 = alkyl, alkoxy, halo, CN, NR12R13, N+R12R13R14, N:CR12R13, SO3H, CO2H, OH, pyridyl, pyridinium, thienyl; R12-14 = H, OH, (substituted) alkyl, cycloalkyl, aryl; n, m = 0-2; p, q = 0-3; r = 0-1; s 2-5; t = 0-4; u = 2-7; v, w = 0-7], and (f) transition metals. Thus, a detergent comprising Na2CO3 22, Na citrate 10, Tokusil N (oil absorption 250 mL/100 g) 2, Softanol **EP** 90100 5, SPC-D (Na percarbonate) 10, **tris**[(2-pyridyl)methyl]amine 0.2, MnCl2 0.02, Duramyl 60T 0.5, limonene 0.2%, and balance Na2SO4 showed good bleaching properties and storage stability.

L18 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:134448 HCAPLUS Full-text
DOCUMENT NUMBER: 130:198180
TITLE: Granular bleaching detergent compositions with good fluidity and good storage stability for automatic dishwashers
INVENTOR(S): Okano, Tomomichi; Nishida, Nobuo; Yamamoto, Nobuyuki; Ono, Junji
PATENT ASSIGNEE(S): Lion Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 11050096 | A | 19990223 | JP 1997-220976 | 19970801 |
| PRIORITY APPLN. INFO.: | | | JP 1997-220976 | 19970801 |

OTHER SOURCE(S): MARPAT 130:198180
GI



AB Title compns. having low angle of repose contain (a) peroxy compds. generating H2O2 in aqueous **solns**, (b) amylases, (c) nonionic surfactants, (d) inorg. compds. with oil absorption (JIS K 6220) ≥100 mL/100 g, (e) N-containing ligands B(CHR1)nX[(CHR2)mA]2 [X = N, P CR3; n = 0-2; m = 0-2; R1-3 = H, (substituted) alkyl, cycloalkyl, aryl; A, B = NR4R5, QR6p, I, II, N:CR4R5; Q = pyridyl; p = 0-4; q = 2-7; R4-9 = H, OH, alkyl, cycloalkyl, aryl; R6 = H, (substituted) alkyl, alkoxy, halo, CN, NR10R11, NR10R11R12, N:CR10R11, SO3H, CO2H, OH, pyridyl, pyridinium, thienyl; R10-12 = H, OH, (substituted) alkyl, cycloalkyl, aryl], and (f) transition metals. Thus, a detergent comprising Na2CO3 22, 3Na citrate 10, Tokusil N (oil absorption 250 mL/100 g) 2, Softanol **EP** 90100 5, Na percarbonate 10, **tris**[(2-pyridyl)methyl]amine 0.2, MnCl2 0.02, Duramyl 60T 0.5, limonene 0.2%, and balance Na2SO4 showed good bleaching properties and storage stability.

L18 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:581408 HCAPLUS Full-text
DOCUMENT NUMBER: 129:251600
TITLE: Evaluation of the electrochemical characteristics of a poly(vinyl alcohol)/poly(acrylic acid) polymer blend
AUTHOR(S): Dasenbrock, Catherine O.; Ridgway, Thomas H.; Seliskar, Carl J.; Heineman, William R.
CORPORATE SOURCE: Dep. Chem., Univ. Cincinnati, Cincinnati, OH, 45221-0172, USA
SOURCE: Electrochimica Acta (1998), 43(23), 3497-3502
CODEN: ELCAAV; ISSN: 0013-4686
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The polymer blend poly(vinyl alc.)/poly(acrylic acid) (PVA/PAA) was evaluated as a coating on graphite electrodes. The uptake of **tris**(2,2'-bipyridyl)ruthenium(II), Ru(bpy)32+, by the film was monitored by cyclic voltammetry and is pH dependent. A plot of current response vs. pH is analogous to a titration curve of a mixture of acids with pKa values at 4-6. At pH 1 where the PVA/PAA film is neutral, voltammograms of Ru(bpy)32+ were comparable to ones recorded at a bare electrode. At pH 7, where the film is anionic because the carboxyl group is deprotonated, a current enhancement factor of 9 to 16 compared to a bare electrode was obtained. This pH-dependent behavior is also observable for plots of the peak separation vs. pH in which **Ep** of cyclic voltammograms increases with pH. The effect of different supporting electrolytes was studied by measuring the current response with LiNO3, NaNO3, and KNO3 over a range of pH. Cyclic voltammograms of Fe(CN)63- showed that neg. charged species are rejected by the polymer film.
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:172896 HCAPLUS Full-text
DOCUMENT NUMBER: 128:187824

TITLE: Structure and Physical Properties of Trigonal Monopyramidal Iron(II), Cobalt(II), Nickel(II), and Zinc(II) Complexes
AUTHOR(S): Ray, Manabendra; Hammes, Brian; Yap, Glenn P. A.; Rheingold, Arnold L.; Borovik, A. S.
CORPORATE SOURCE: Departments of Chemistry, Kansas State University, Manhattan, 19716, USA
SOURCE: Inorganic Chemistry (1998), 37(7), 1527-1532
CODEN: INOCAJ; ISSN: 0020-1669
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Trigonal monopyramidal complexes of the tripodal ligand **tris**((N-tert-butylcarbamoyl)methyl)aminato, [1But]3-, were synthesized and characterized. The structures of [Co1But]-, [Zn1But]-, and [Ni1But]- confirm that trigonal monopyramidal coordination geometry occurs in these complexes where the three amidate nitrogens are arranged in the trigonal plane and the amine N is bonded apically to the metal ions. The solid-state structures of [Co1But]-, [Zn1But]-, and [Ni1But]- are nearly identical indicating that the trigonal ligand [1But]3- enforces the trigonal monopyramidal structure in these metal ions. Crystal data: K[Co1But]·0.5DMF crystallizes in the monoclinic space group C2/c, with cell dimensions a 18.844(4), b 9.809(3), c 28.715(13) Å, β 102.70°, and Z = 8; (NEt4)[Zn1But]·THF crystallizes in the monoclinic space group P21/c, with a 13.244(3), b 11.285(5), c 25.625(3) Å, β 104.45(1)°, and Z = 4. The 1H NMR spectrum of the diamagnetic [Zn1But]- also suggests that the complex retains its C3 symmetry in **solution** Room-temperature magnetic susceptibility measurements show that [Fe1But]-, [Co1But]-, and [Ni1But]- are high spin. The cyclic voltammetry of [Co1But]- and [Ni1But]- at a glassy C surface and at a scan rate of 100 mV s-1 shows quasi-reversible one electron oxidation at E1/2 = 0.77 (Δ**Ep** = 93 mV, ipcipa-1 = 0.69) and 0.56 (Δ**Ep** = 75 mV, ipcipa-1 = 0.79) V vs. SCE, resp. However, at slower scan rates these redox processes become irreversible and attempts to isolate the oxidized products at room temperature were unsuccessful. The chemical oxidation of [Ni1But]- with [Fe(bpy)3]3- in 1:1 propionitrile-DMF mixture at -75° generated an EPR-active species (77 K, g1 = 2.29, g2 = 2.16, g3 = 2.03, a3 = 20 G) assigned to a Ni(III) complex with rhombic symmetry. [Fe1But]- shows one irreversible oxidation (**Ep**,a = 0.05 V vs. SCE) under the same conditions. These results are consistent with [1But]3- being able to stabilize trigonal monopyramidal complexes of low-valent metal ions.

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1995:281169 HCAPLUS Full-text
DOCUMENT NUMBER: 122:239830
TITLE: Tri(1-cyclohepta-2,4,6-trienyl)phosphine, P(C7H7)3, and tetra(1-cyclohepta-2,4,6-trienyl)phosphonium tetrafluoroborate, [P(C7H7)4]BF4
AUTHOR(S): Herberhold, Max; Bauer, Kurt; Milius, Wolfgang
CORPORATE SOURCE: Lab. Anorganische Chemie, Universitaet Bayreuth, Bayreuth, Germany
SOURCE: Zeitschrift fuer Anorganische und Allgemeine Chemie (1994), 620(12), 2108-13
CODEN: ZAACAB; ISSN: 0044-2313
PUBLISHER: Barth
DOCUMENT TYPE: Journal
LANGUAGE: German

OTHER SOURCE(S): CASREACT 122:239830

AB The reaction of **tris**(trimethylsilyl)phosphine, P(SiMe3)3, with tropylium bromide, C7H7+Br-, in polar solvents such as dichloromethane or THF gives P(C7H7)3 (1) and [P(C7H7)4]Br (2a). According to the x-ray crystallog. structure detns., all 1-cyclohepta-2,4,6-trienyl substituents are present in the boat conformation in both P(C7H7)3 (1) and the phosphonium salt, [P(C7H7)4]BF4 (2b). The boat-shaped C7H7 rings are significantly more flattened if the phosphorus occupies the axial rather than the equatorial position at the ring substituent. Addition of a chalcogen to the lone pair at the central phosphorus atom of 1 leads to the chalcogena-phosphoranes **EP**(C7H7)3 (E = O (3a), S (3b), Se (3c)). The new 1-cyclohepta-2,4,6-trienylphosphorus compds. 1, 2b and 3a-c were characterized by their 1H, 13C, and 31P NMR spectra in C6D6 **solution**

L18 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:523853 HCAPLUS Full-text

DOCUMENT NUMBER: 121:123853

TITLE: Synthesis, Structure, Reactivity, and **Solution** Behavior of Bis{dicarbonyl[hydridotris(1,2,4-triazolyl)borato]ruthenium(I)}(Ru-Ru)

AUTHOR(S): Shiu, Kom-Bei; Guo, Wei-Ning; Peng, Shie-Ming; Cheng, Ming-Chu

CORPORATE SOURCE: Department of Chemistry, National Cheng Kung University, Tainan, 70101, Taiwan

SOURCE: Inorganic Chemistry (1994), 33(13), 3010-13
CODEN: INOCAJ; ISSN: 0020-1669

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Reaction of polymeric catena-[Ru(OAc)(CO)2] with K hydridotris(1,2,4-triazolyl)borate (KHB(tz)3) gives readily [Ru{η3-HB(tz)3}(CO)2]2 (1). 1 Reacts further with halogens to give [Ru{η3-HB(tz)3}(CO)2X] (X = Br, I). The solid-state structure of 1 was determined by the x-ray crystallog. to reveal a Ru-Ru bond length of 2.8688(7) Å, significantly shorter than the reported value of 2.882(1) Å in [Ru{η3-HB(pz)3}(CO)2]2 (2) (pz = 1-pyrazolyl), though both structures are similar in having a cis staggered geometry: a 8.9687(21), b 14.444(4), c 23.114(5) Å, β 99.241(20)°, monoclinic, space group P21/c, Z = 4, R = 0.026, and Rw = 0.024 based on 4467 with I > 2.0 σ(I). By comparing the variable-temperature NMR spectra of 1 and 2, the fluxional mechanism of both compds. should involve participation of the equatorial semibridging carbonyls, undergoing pairwise exchange with synchronous nondissociative rotation of the **tris**(azolyl)borato group around the Ru---B bond, probably with more or less rotation about the Ru-Ru bond. A higher 1-electron irreversible oxidation potential at **Ep**,a = 633 mV vs. Ag/AgNO3 in MeCN was observed for 1 than that for 2 (**Ep**,a = 312 mV), consistent with the sluggish reactivity of 1 toward diiodine. The stronger oxidation resistance and the unexpected results of a Ru-Ru and a Ru-L bond length reduction in 1, to its analog, 2, lead to the recognition that the HOMO is probably a σ orbital for 1 and 2, though both compds. have the same filled orbitals of σ, π, δ, δ*, and π* as [Ru2(CO)4(OAc)2L2] (L = axial ligand).

L18 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:503340 HCAPLUS Full-text

DOCUMENT NUMBER: 121:103340

TITLE: Application of the EPOS (Enhanced polymer one-step staining) method to rapid intraoperative diagnosis.

Suitable staining conditions for localizing cell proliferation-associated nuclear antigens (PCNA and Ki-67 antigen)
AUTHOR(S): Serizawa, Akihiko; Kawai, Kenji; Yasuda, Masanori; Tsutsumi, Yutaka
CORPORATE SOURCE: Sch. Med., Tokai Univ., Isehara, 259-11, Japan
SOURCE: Byori to Rinsho (1994), 12(6), 745-8
CODEN: BYRIEM; ISSN: 0287-3745
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Optimal conditions of **EPOS** were determined for PCNA and Ki-67 using human tonsil with hyperplasia. Formalin-MeOH mixture (50:50) gave good results for PCNA by 15 s fixation, and single use of acetone, EtOH, or MeOH gave poor results. The mixture gave poor results in Ki-67 staining, and 10% formalin or 4% buffered paraformaldehyde gave good results. Good staining period was 3 or 5 min. The development **solution** of 20 mg/dL DAB-H2O2-**Tris**-HCl (pH 7.6) containing 10 mM imidazole gave good staining results by 2 min.

L18 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1994:30883 HCAPLUS Full-text
DOCUMENT NUMBER: 120:30883
TITLE: Fe3-triangle opening and closing by a single two-electron process: role of the one-electron-reduced intermediate in the electrocatalytic ligand substitution reactions of Fe3(CO)9(μ3-PMn(CO)2Cp)2
AUTHOR(S): Koide, Yoshihiro; Schauer, Cynthia K.
CORPORATE SOURCE: Dep. Chem., Univ. North Carolina, Chapel Hill, NC, 27599-3290, USA
SOURCE: Organometallics (1993), 12(12), 4854-62
CODEN: ORGND7; ISSN: 0276-7333
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The thermodynamically unstable radical [Fe3(CO)9(μ3-PMn(CO)2Cp)2]•- (1•-) is implicated as the active species in the electron transfer chain (ETC) catalytic ligand substitution of the Fe-bound carbonyl ligands in Fe3(CO)9(μ3-PMn(CO)2Cp)2 (1). 1•- Is the 1-e- reduced intermediate relating the closed cluster 1 (with three Fe-Fe bonds) and the open cluster 12- (with two Fe-Fe bonds); interconversion between 1 and 12- occurs in a single 2-e- wave (ΔEp = 36 mV) in the cyclic voltammogram. Substitution of CO by P(OMe)3 or PMe3 can be induced by passing a small amount of cathodic current while a cyclic voltammogram is acquired in the presence of PR3 to sequentially produce Fe2(CO)8(PR3)(μ3-PMn(CO)2Cp)2 (11, R = OMe; 12, R = Me) and then Fe3(CO)7(PR3)2(μ3-PMn(CO)2Cp)2 (21, R = OMe; 22, R = Me); no **tris**-substituted clusters are observed under electrocatalytic conditions. The sequential substitutions of CO by PR3 occur on two different Fe(CO)3 groups. The 2-e- behavior observed for 1 is maintained in the PR3-substituted derivs. The same clusters can also be produced on a preparative scale in THF **solution** using a catalytic amount of sodium benzophenone ketyl to initiate the radical chain in the presence of the appropriate stoichiometric amount of PR3. Reactions between 12- and PR3 can be induced by oxidative electrochem., but the reactions are not electrocatalytic. The efficiency of the ETC reaction was gauged by the measurement of turnover nos. (TN) for the P(OMe)3 substitution reaction. The first step proceeds with a TN of .apprx.1000 mol/faraday while TN for the second substitution step drops to .apprx.100 mol/faraday. The substitution reaction rate is insensitive to the nature and concentration of the incoming nucleophile, and the reaction is strongly inhibited by a CO

atmospheric, all consistent with a CO-dissociative mechanism. The isolated PR3-substituted clusters are unstable to bulk reduction The monosubstituted clusters undergo a rapid, clean disproportionation reaction that is induced by a ligand redistribution corresponding to the net reaction 11 (or 12) + 1e- → 12- + 21 (or 22).

L18 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:401756 HCAPLUS Full-text
DOCUMENT NUMBER: 119:1756
TITLE: Chromatographic purification of erythropoietin
INVENTOR(S): Por-Hsiung, Lai; Strickland, Thomas Wayne
PATENT ASSIGNEE(S): Kirin-Amgen, Inc., USA
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 8607594 | A1 | 19861231 | WO 1986-US1342 | 19860620 |
| W: AU, DK, JP | | | | |
| RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| US 4667016 | A | 19870519 | US 1985-747119 | 19850620 |
| IL 79176 | A | 19920621 | IL 1986-79176 | 19860420 |
| CA 1297635 | C | 19920317 | CA 1986-511855 | 19860618 |
| ZA 8604573 | A | 19870225 | ZA 1986-4573 | 19860619 |
| ES 556257 | A1 | 19880101 | ES 1986-556257 | 19860619 |
| EP 228452 | A1 | 19870715 | EP 1986-904556 | 19860620 |
| EP 228452 | B1 | 19950322 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| JP 63503352 | T | 19881208 | JP 1986-503570 | 19860620 |
| JP 06098019 | B | 19941207 | | |
| AU 606578 | B2 | 19910214 | AU 1986-61230 | 19860620 |
| AU 8661230 | A | 19870113 | | |
| IL 97135 | A | 19920621 | IL 1986-97135 | 19860620 |
| AT 120208 | T | 19950415 | AT 1986-904556 | 19860620 |
| DK 8700813 | A | 19870218 | DK 1987-813 | 19870218 |
| DK 175251 | B1 | 20040719 | | |
| CA 1312994 | C2 | 19930119 | CA 1991-616009 | 19910221 |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 1985-747119 | A | 19850620 |
| US 1986-872152 | A | 19860613 |
| CA 1986-5118557 | A3 | 19860618 |
| IL 1986-79176 | A | 19860620 |
| WO 1986-US1342 | W | 19860620 |

AB Methods for chromatog. purification of **erythropoietin** from a variety of sources, including biol. fluids or transgenic animal cell lines, is described. The first method is a reversed-phase chromatog. that involves adsorption of the **erythropoietin** onto a C4 or C6 resin followed by elution with increasing concns. of EtOH (either stepwise or in a gradient); after removal of EtOH, an **erythropoietin** fraction of high specific activity with yield ≥50% is obtained. A second method using anion-exchange chromatog. on DEAE-agarose at acid pH under conditions that prevent activation of acid proteinases is also described. The two methods may be combined for rapid purification of **erythropoietin** in high yield and purity. Culture supernatants from CHO cells stably expressing the **erythropoietin** gene on the plasmid pDSVL-gHuEPO were

concentrated by diafiltration and fractionated by chromatog. on VYDAC 214TP-B using a 0-80% EtOH gradient in 10 mM tris pH 7.0. The peak of UV absorption eluting around 60% EtOH was pooled and applied to a DEAE-agarose column which was washed with an acid 6M urea buffer to remove proteinases and the urea removed and the column brought to neutral pH with a low-salt buffer. CuSO4 is optionally present in the wash to assist in oxidation of sulfhydryl groups of undesired protein. **Erythropoietin** was eluted with a buffer containing NaCl 75 mM. Final purity of the **erythropoietin** is >95% and is low in pyrogens and serum proteins.

L18 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1991:525604 HCAPLUS Full-text
DOCUMENT NUMBER: 115:125604
TITLE: On the synthesis and characterization of bis(semibenzoquinonediiminato)copper as a donor precursor of the semiconducting and ferromagnetic Cu[C6H4(NH)2]2(I3)1.66 charge-transfer complex
AUTHOR(S): Ricciardi, Giampaolo; Rosa, Angela; Morelli, Giancarlo; Lelj, Francesco
CORPORATE SOURCE: Dep. Chem., Univ. Basilicata, Potenza, 85100, Italy
SOURCE: Polyhedron (1991), 10(9), 955-61
CODEN: PLYHDE; ISSN: 0277-5387
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis and characterization of Cu(s-bqdi)2 (s-bqdiH2 = semibenzoquinonediimine ] are described and its relevant properties are compared with those of the known d8 and d6 metal bis- or tris-benzoquinonediiminates. The complex is paramagnetic in the solid state with μeff = 1.86 μB. The dominant form of Cu(s-bqdi)2 in aliphatic alcs. like MeOH, EtOH, BuOH or in THF is dimeric or oligomeric, but monomeric in MeCN, DMSO and DMF, as proved by UV-visible and ESR spectra. The stability of Cu(s-bqdi)2 to O exposure in different solvents parallels the association behavior and follows the order: EtOH » DMF » MeCN. The electrochem. response of the [Cu-N4]-system (z = 0, ± 1, ± 2) in MeCN consists of two 0 .dblharw. + 1 (E1/2 = -0.10 V vs SCE) and + 1 .dblharw. + 2 (E1/2 = +0.98 V vs SCD) reversible electron transfers and an irreversible process at **Ep**,c = -1.87 V attributed to 0 → -1 reduction Iodination of an ethanolic **solution** of Cu(s-bqdi)2 led to the isolation of polycryst. Cu(s-bqdi)2I5 which is formulated as Cu(s-bqdi)2(I3)1.66 on the basis of IR, Raman and thermogravimetric anal. The new material exhibits high, room-temperature conductivity (σ = 6.6.10-2 S cm-1) and semiconducting behavior at 700-300 K, with a sharp transition at 215 K. Static magnetic susceptibility measurements provide μeff = 1.23 μB for Cu(s-bqdi)2(I3)1.66 at 295 K which is found to obey the Curie-Weiss law between 70°K and 295°K. The elec. and magnetic behavior of Cu(s-bqdi)2(I3)1.66 is due to strong homomol. intra- and interstack interactions between donor mols. with radical cationic character.

L18 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1989:71999 HCAPLUS Full-text
DOCUMENT NUMBER: 110:71999
ORIGINAL REFERENCE NO.: 110:11819a,11822a
TITLE: High-performance affinity chromatography of human progesterone receptor
AUTHOR(S): Boyle, Denis M.; Van der Walt, L. Andre
CORPORATE SOURCE: Dep. Chem. Pathol., Univ. Witwatersrand, Johannesburg,

2000, S. Afr.
SOURCE: Journal of Chromatography (1988), 455, 434-8
CODEN: JOCRAM; ISSN: 0021-9673
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Progesterone receptor was purified from breast cancer cells and uterine tissues of humans by high-performance affinity chromatog. An Ultraffinity-EP column was used; the affinity matrix was prepared by recycling Organon 2058 in MeCN-H2O (50:50) for 24 h. Elution was with a **solution** containing N,N-dimethylformamide, Na thiocyanate, [3H]Organon 2058 in a 10 mM pH 7.6 **Tris buffer** containing EDTA and dithiothreitol. Recoveries were 40-50%. Results were satisfactory.

L18 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1981:457430 HCAPLUS Full-text
DOCUMENT NUMBER: 95:57430
ORIGINAL REFERENCE NO.: 95:9661a,9664a
TITLE: Preparative capillary isotachophoresis: a micro method for the purification of erythropoietin
AUTHOR(S): Thorn, W.; Blaeker, F.; Weiland, E.
CORPORATE SOURCE: Inst. Org. Chem. Biochem., Univ. Hamburg, Hamburg, D-2000/13, Fed. Rep. Ger.
SOURCE: Journal of Chromatography (1981), 210(2), 319-25
CODEN: JOCRAM; ISSN: 0021-9673
DOCUMENT TYPE: Journal
LANGUAGE: English
AB **Erythropoietin** (I) was purified from the urine of a patient with chronic myeloid leukemia with high yield and high purification factor by capillary isotachophoresis by using a LKB Tachophor equipped with a micropreparative fraction collector. The length of the capillary column was 43 cm and a suitable buffer system was 10 mM **Tris**-chloride (pH 8.00)-15.38 mM glycine-Ba(OH)2. I was isolated from the urine by BzOH-Me2CO precipitation and gel filtration on Sephadex G 50 and 5 μL were used for isotachophoresis. Quantitation of the protein present in the zone with I activity was accomplished by estimating the real zone length of the I zone by using indigo tetrasulfonate and the UV signal length. There was a linear relation between the real zone length and the UV signal length. High accuracy was achieved in every run by determination of the time-distance delay following injection of 0.2 μL of a dye along with the sample. The dye did not affect **resolution** A purification factor of 228 and a recovery of 59% were achieved by isotachophoresis of I.

L18 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1980:190752 HCAPLUS Full-text
DOCUMENT NUMBER: 92:190752
ORIGINAL REFERENCE NO.: 92:30761a,30764a
TITLE: Extraction-polarographic determination of cobalt(II) and nickel(II) as 2,2'-bipyridine complexes in acetonitrile
AUTHOR(S): Nagaosa, Yukio
CORPORATE SOURCE: Fac. Eng., Fukui Univ., Fukui, 910, Japan
SOURCE: Analytica Chimica Acta (1980), 115, 81-8
CODEN: ACACAM; ISSN: 0003-2670
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The tris(2,2'-bipyridine)cobalt(II) complex gives a reversible d.c. wave with E1/2 = -1.02 V vs. SCE and a sharp differential pulse peak at **Ep** = -1.03 V in a salted-out MeCN phase. A simple selective method is described for the determination of Co(II); down to 0.25 μg Co(II) can be determined in the presence of large amts. of Ni, Zn, Cd, Pb, and Cu; Fe(III) can be masked with NaF. The method is applicable to the determination of >0.01% Co in Ni salts and >5 × 10-5% Co in Fe salts. Ni(II) can also be extracted from aqueous **solution** and determined by differential pulse polarog., even in presence of a 20-fold amount of Co(II) by masking with EDTA; >0.01% Ni in Co salts can be determined reproducibly.

L18 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1978:22506 HCAPLUS Full-text
DOCUMENT NUMBER: 88:22506
ORIGINAL REFERENCE NO.: 88:3605a,3608a
TITLE: 9-Butylazabicyclo[3.3.1]nonane radical cation, the first long-lived saturated amine radical cation
AUTHOR(S): Nelsen, stephen F.; Kessel, Carl R.
CORPORATE SOURCE: Dep. Chem., Univ. Wisconsin, Madison, WI, USA
SOURCE: Journal of the Chemical Society, Chemical Communications (1977), (14), 490-1
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

I

AB The title amine I, prepared by Wolff-Kishner reduction of the 3-keto compound gave a reversible cyclic voltammetry oxidation wave in acetone (E0 = + 0.74V vs. SCE., ΔEp = 65 mV) and is the first saturated amine not to show electrochem. irreversible oxidation I•+ has a lifetime of several hours in CH2Cl2 **solns.** prepared by **tris**-(p-bromophenyl)amine cation-hexachloroantimonate oxidation

L18 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:464957 HCAPLUS Full-text
DOCUMENT NUMBER: 81:64957
ORIGINAL REFERENCE NO.: 81:10359a,10362a
TITLE: Removal of catalyst from amorphous copolymers
INVENTOR(S): Plonsker, Larry
PATENT ASSIGNEE(S): Ethyl Corp.
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 3804815 | A | 19740416 | US 1972-241182 | 19720405 |

PRIORITY APPLN. INFO.: US 1972-241182 A 19720405

AB V-Al catalysts were removed from **EP** or EPDM rubber **solns.** by washing the copolymer **solution** with aqueous NaOH, separating the used aqueous NaOH **solution**, filtering the copolymer **solution**, and removing the aqueous phase which separated from the filtered product. Thus, an ethylene-propylene-1,4-hexadiene polymer [25038-37-3] was prepared in tetrachloroethylene with an iso-Bu2AlCl-V **tris**(acetylacetonate) catalysts, mixed with an antioxidant, stirred 5 min with an equal volume of 20% aq.NaOH, and separated The organic layer was again washed with an equal volume of 5% aqueous NaOH, removed, filtered, and separated from the small amount of aqueous phase. The solvent was removed by steam distillation, giving a rubber crumb.

L18 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:414272 HCAPLUS Full-text
DOCUMENT NUMBER: 81:14272
ORIGINAL REFERENCE NO.: 81:2311a,2314a
TITLE: Fiber-reinforced plastics
INVENTOR(S): Kajita, Hiroyuki; Nishio, Nobuyuki
PATENT ASSIGNEE(S): Meisei Chemical Works, Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 48100438 | A | 19731218 | JP 1972-33084 | 19720331 |
| JP 51008409 | B | 19760316 | | |

PRIORITY APPLN. INFO.: JP 1972-33084 A 19720331

AB Manufacture of organic fiber-reinforced resins involved treatment with .geq.1 I (n .geq. 2, Z = n-valent organic or inorg. group, R = H, Me). For example, a **solution** of 12 parts 4,4'-bis(N',N'-ethyleneureido)diphenylmethane (I) [7417-99-4] in 228 parts THF was mixed with a **solution** of 12 parts PVC [9002-86-2] (d.p. 800) containing 1.6 phr dioctyl phthalate and 1 phr Pb stearate in 108 parts THF and then with 1000 parts acetone. Nylon filaments (450 parts, 10 cm long) were impregnated with the mixed **solution**, dried at 100.deg. for 60 min, rolled with 2550 parts Zeon 103 **EP**-8, pulverized, and injection-molded to give a molding with flexural strength 13.06 kg/mm2, flexural modulus 603 kg/mm2, tensile strength 9.72 kg/mm2, and impact strength 3.97 kg-cm/cm2, compared with 10.18, 580, 6.01, and 2.65, resp., for a molding using a silane coupler in place of I. Other I used were **tris**(1-aziridinyl) phosphine oxide and hexamethylene diisocyanate-2-methylethylenimine adduct.

L18 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1974:121799 HCAPLUS Full-text
DOCUMENT NUMBER: 80:121799
ORIGINAL REFERENCE NO.: 80:19617a,19620a
TITLE: Aziridine couplers for fiber-reinforced plastics
INVENTOR(S): Kajita, Hiroyuki; Nishio, Nobuyuki
PATENT ASSIGNEE(S): Meisei Chemical Works, Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 48080170 | A | 19731026 | JP 1972-11159 | 19720131 |
| JP 51025073 | B | 19760728 | | |

PRIORITY APPLN. INFO.: JP 1972-11159 A 19720131

AB The aziridine derivs. I (n .geq.2, Z = n-valent organic or inorg. radical, R = H or Me) were couplers for reinforcing synthetic resins with carbon, asbestos, and other inorg. fibers. For example, a **solution** of 12 parts bis[4-(1-aziridinyl)phenyl]methane [51287-38-8] in 228 parts THF was mixed with a **solution** of 12 parts PVC [9002-86-2] (d.p. 800) composition (containing 1.6 phr dioctyl phthalate and 1 phr Pb stearate) in 108 parts THF and thinned with 1000 volume parts acetone. Acrylic carbon fiber (10 mm long, 450 parts) was impregnated with the **solution**, blended with 2550 parts Zeon 103 **EP**-8, and injection-molded to give a molding with flexural strength 14.07 kg/mm2, flexural modulus 655 kg/mm2, tensile strength 10.90 kg/mm2, and impact strength 4.95 kg-cm/cm2, compared with 10.10, 565, 5.90, and 2.60, resp., for molding using a silane coupler. **Tris**(1- aziridinyl)phosphine oxide [545-55-1] and 2,4,6-triz(1-aziridinyl)-s- triazine [51-18-3] were also used, and phenolic and polyamide resins were also reinforced.

L18 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1973:107747 HCAPLUS Full-text
DOCUMENT NUMBER: 78:107747
ORIGINAL REFERENCE NO.: 78:17295a,17298a
TITLE: Reaction mechanism of the Ca2+-dependent ATPase of sarcoplasmic reticulum from skeletal muscle. VIII. Molecular mechanism of the conversion of somatic energy to chemical energy in the sarcoplasmic reticulum
AUTHOR(S): Yamada, Sinpei; Sumida, Michihiro; Tonomura, Yuji
CORPORATE SOURCE: Fac. Sci., Osaka Univ., Tonaka, Japan
SOURCE: Journal of Biochemistry (Tokyo, Japan) (1972), 72(6), 1537-48
CODEN: JOBIAO; ISSN: 0021-924X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The sacroplasmic reticulum (SR) was loaded with Ca2+ by simply preincubating it in **solns.** containing various concns. of CaCl2 and KCl and **Tris**-maleate at pH 7.0 and 0° for several hrs. When the Ca2+-loaded reticulum was put into a **solution** containing various buffers, MgCl2, KCl and 5mM inorg. phosphate-32P at pH 7.0 and 20°, P was rapidly incorporated into the SR. The maximum amount of P-incorporation reached 4 moles/106 g SR protein. The time-course of P-incorporation showed a lag phase, and a remarkably large dependence on temperature The dependence of the amount of P incorporated ([**EP**]) in the steady state on Ca2+-gradient across the membrane and the concns. of Mg2+ ions and inorg. phosphate in the phosphorylation medium was determined in relation to the ε (total concentration of phosphorylation site) and the electrochem. activities of Ca2+ inside and outside the membrane, resp. When [**EP**]/ε was 0.5 in the presence of 20mM MgCl2 and 5mM inorg. phosphate (Pi), the free energy obtained by transporting 2 moles of Ca2+ from inside to outside the membrane was estimated to be .apprx.12 Kcal. The phosphorylation of the Ca2+-loaded SR

with Pi was competitively inhibited by ATP. At various pH values the stability of the acid-denatured phosphorylated intermediate formed by the reaction with Pi was equal to that of the intermediate formed by the reaction with ATP. Decomposition of the acid-denatured phosphorylated intermediate produced by the reaction with Pi was accelerated by adding NH2OH in the same way as that of the intermediate produced by the reaction with ATP. Furthermore, the SDS-gel electrophoretogram of the phosphorylated intermediate showed that P was incorporated in the protein moiety of the ATPase. When ADP was added to the Ca2+-loaded SR, 30 sec after starting the phosphorylation experiment, the amount of P incorporated decreased markedly and rapidly and ATP was formed. The amount of ATP synthesized was exactly half the amount of Ca2+ ions loaded into the SR during the preincubation.

L18 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1969:436939 HCAPLUS Full-text
DOCUMENT NUMBER: 71:36939
ORIGINAL REFERENCE NO.: 71:6805a
TITLE: Renal erythropoietic factor; some properties and its interaction with histones
AUTHOR(S): Kuratowska, Zofia; Kopec, Maria
CORPORATE SOURCE: Inst. Nucl. Res., Warsaw, Pol.
SOURCE: British Journal of Haematology (1969), 16(5), 465-73
CODEN: BJHEAL; ISSN: 0007-1048
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Rabbits were injected i.v. with CoCl2 **solution** to stimulate production of renal erythropoietic factor. After 24 hrs., the kidneys were removed and homogenized and the cell nuclei were isolated. The nuclei were extracted with **Tris buffer**, pH 7.5, containing 5mM MgCl2 and a fractionation procedure (described) yielded the nuclear protein fraction, which possessed erythropoietic activity. This was assayed by the method of W. Fried (1957). This activity was destroyed by proteolytic enzymes and by neuraminidase. It was completely inhibited by histones isolated from mammalian liver and from chicken erythrocytes. The most potent inhibitory effect was evoked by the arginine-rich histone fraction, while the lysine-rich fractions had no effect. It is proposed that the depression action of **erythropoietin** on RNA synthesis may result from its interaction with a histone-repressor mol.

L18 ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1965:67150 HCAPLUS Full-text
DOCUMENT NUMBER: 62:67150
ORIGINAL REFERENCE NO.: 62:11973f-h,11974a-b
TITLE: Epoxy organotin compounds for stabilizing resin compositions
INVENTOR(S): Mack, Gerry P.
PATENT ASSIGNEE(S): M & T Chemicals Inc.
SOURCE: 8 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 3147285 | | 19640901 | US 1956-599003 | 19560720 |
| PRIORITY APPLN. INFO.: | | | US | 19560720 |

AB To Et acrylate (0.2 mole), dissolved in 250 ml. ethylene dichloride (I), 1.44 moles Na2HPO4 is added. The stirred mixture is heated to boiling and 90 ml. of a solution containing peroxytrifluoroacetic acid and 50 ml. I is added dropwise in 30 min. The mixture is refluxed for 30 min. and worked up to give 55% Et glycidate (II), b60 88-90°. One mole II is dissolved in 200 ml. toluene. To this mixture, 2 moles Bu2SnO (III) is slowly added. The reaction continues at its b.p. for 20 min. The toluene is boiled off to give a yellow viscous product. Similar products are obtained by using glyceryl monooleate, maleic anhydride, III; glyceryl dioleate, phthalic anhydride, III; N-(n-hexyl)-9,10-epoxystearamide, dioctyltin dimethoxide; Bu epoxystearate (IV), III; Me epoxystearate, dioctadecyltin oxide; n-octyl epoxystearate, trioctyltin oxide; isooctyl erpoxystearate, Me3SnO; cyclohexyl epoxystearate, dilauryltin oxide; 2-chloroethyl epoxystearate, Et2SnO; Ph epoxystearate, dicyclohexyltin oxide; glycidyl epoxystearate, Ph2SnO; tetrahydrofurfuryl epoxystearate, dithienyltin oxide; p-tert-butylphenyl epoxystearate, dibenzyltin oxide; epoxyoctadecyl epoxystearate, Me2SnO; Bu epoxytallate, dinaphthyltin oxide; Bu epoxysoyate, bis[tris(4-chlorobutyl)tin] oxide; epoxidized glycerol monoricinoleate triacetate, V; glycidol, Bu2SnCl2; epoxypropoxide, Bu2SnCl2; 5,6-epoxyoctanol, Bu2Sn(OMe)2; epoxidized soybean oil, III; IV, III, isooctyl mercaptoacetate; p-(2,3- epoxypropoxy)phenylurea, Bu2SnCl2; "2,2'-(2-ethylhexanoylamino)diethyl diepoxystearate," III; IV, Bu2SnS; 3,4-epoxy-6-methylcyclohexylmethyl 3,4-epoxy-6-methylcyclohexanecarboxylate, III; epoxyethyl acetate, III; epoxyethyl 2-ethylhexanoate, III; and 2,3-epoxypropyl malonate, trihexyltin chloride. Also, dibutyltin S-(dodecyl mercaptido)-N-[N-(2,3- epoxypropyl)-p-toluenesulfonamide], dibutyltin S-(isooctyl mercaptoacetate)-N-[N-(2,3-epoxypropyl)-p-toluenesulfonamide], dibutyltin N,N'-bis[N-(2,3-epoxypropyl)-p-toluenesulfonamide], bis[p- (epoxyethyl)phenyl]-tin bis(9,10-epoxystearate), and bis(epoxyethyl)tin bis(9,10-epoxystearate) are prepared for use as heat stabilizers in resins. A number of these stabilizers were incorporated into a mixture of 100 parts poly(vinyl chloride) (Geon 101 EP) and 50 parts plasticizer (dioctyl phthalate) in amts. of 1-2% based on poly(vinyl chloride). The samples were rated visually for color after 15, 30, 45, 60, 75, and 120 min. at 350°F after milling for 5 min. at 320-5°F. The stabilizers were also evaluated in chlorinated rubber (67% Cl), a 60:40 vinyl chloride/vinylidene chloride copolymer, and a 80:20 vinyl chloride/vinyl acetate copolymer.

L18 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1964:30829 HCAPLUS Full-text
DOCUMENT NUMBER: 60:30829
ORIGINAL REFERENCE NO.: 60:5458e-h,5459a-c
TITLE: Esters containing epoxide groups
INVENTOR(S): Humphreys, Keith W.; Stark, Bernard P.; Webb, Reginald F.
PATENT ASSIGNEE(S): CIBA (A.R.L.) Ltd.
SOURCE: 18 pp.
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| GB 943924 | | 19631211 | GB 1960-12064 | 19600405 |
| PRIORITY APPLN. INFO.: | | | GB | 19600405 |

GI For diagram(s), see printed CA Issue.

AB Isomeric esters of the general formula I, where n is 2, 3, or 4 and Z is the residue of an organic compound containing n carboxyl groups or n is 1 and Z is a cycloaliphatic carboxylic acid group with a fused epoxide group, are prepared and can be cross-linked with hardeners such as amines, amides, and Friedel-Crafts catalysts. Thus, a mixture of 30 g. dihydrodicyclopentadienols, 11.8 g. succinic acid, 2 g. p-MeC6H4SO3H, and 100 ml. PhMe is refluxed 2 hrs., cooled, and evaporated to dryness to give 38.2 g. bis(dihydrodicyclopentadienyl) succinates (II). A mixture of 38.2 g. II, 50 ml. CHCl3, and 6 g. NaOAc is agitated at 30° under CO2, com. AcOOH (47.2 g. solution containing 4.665 g. mol. AcOOH/kg.) is added in 5 min., the mixture kept 3.5 hrs. at 30°, and 200 ml. H2O and 50 ml. CHCl3 added. The 2 phases that form are separated, the aqueous phase is washed twice with 100 ml. CHCl3, the (CHCl3 mixts. mixed with 200 ml. 10% NaHCO3, the aqueous phase extracted twice with 50 ml. CHCl3, the organic phases shaken with 200 ml. saturated FeSO4, the aqueous phase extracted twice with 50 ml. CHCl3, and the organic phases dried, filtered, and evaporated to give 39.1 g. bis[4-oxatetracyclo[6.2.1.02,7.03,5]undec-9(and 10)-yl] succinates, m. 145-50°. Also prepared are bis(dihydrodicyclopentadienyl maleates (III), the epoxy esters of III, bis(dihydrodicyclopentadienyl ) phthalates (IV), a mixture of isomeric bisepoxides of IV, bis(dihydrodicyclopentadienyl ) Δ4-tetrahydrophthalates, a mixture of bis[4- oxatetracyclo[6.2.1.02.703.5]undec-9(and 10)-yl)] Δ4- tetrahydrophthalates, bis(dihydrodicyclopentadienyl) adipates (V), a mixture of isomeric bisepoxides of V, dihydrodicyclopentadienyl tetrahydrobenzoates (VI), (b0.8 130-2°), a mixture (b0.8 200°) of isomeric bisepoxides of VI, dihydrodicyclopentadienyl 2,5-endomethylene-Δ3-tetrahydrobenzoates, 4-oxatetracyclo [6.2.1.02,7.02,5]undec-9(and 10)-yl 3-oxatricyclo[3.2.1.02.4] octane-6-carboxylate (infrared: 855 and .apprx.843 cm.-1), bis(dihydrodicyclopentadienyl) sebacates (VII), a mixture of isomeric bisepoxides of VII, dihydrodicyclopentadienyl ethers of dihydrodicyclopentadienyl lactates (VIII) (b0.5 200-10°), a mixture of isomeric bisepoxides of VIII, bis(dihydrodicyclopentadienyl) methylendomethylenetetrahydrophthalates (IX), mixture of isomeric bisepoxides of IX, bis(dihydrodicyclopentadienyl) 3,4,5,6,7,7-hexachloro- 3,6-endomethylenetetrahydrophthalates (X), a mixture of isomeric bisepoxides of X, tris(dihydrodicyclopentadienyl) trimellitates (XI), a mixture of isomeric bisepoxides of XI, dihydrodicyclopentadienyl oleates (XII), a mixture of isomeric bisepoxides of XII, dihydrodicyclopentadienyl esters (XIII) of a tall oil fatty acid, epoxidized XIII (XIV), dihydrodicyclopentadienyl esters (XV) of a corn oil fatty acid, epoxy esters of XV, dihydrodicyclopentadienyl esters (XVI) of a cottonseed fatty acid, epoxy esters of XVI, dihydrodicyclopentadienyl esters (XVII) of castor oil fatty acids, epoxy esters of XVII, dihydrodicyclopentadienyl esters (XVIII) of soya fatty acids, epoxy esters of XVIII, dihydrodicyclopentadienyl esters (XIX) of tung oil fatty acids, epoxy esters of XIX, dihydrodicyclopentadienyl esters (XX) of rapeseed oil fatty acids, epoxy esters of XX, dihydrodicyclopentadienyl esters (XXI) of olive oil fatty acids, epoxy esters of XXI, dihydrodicyclopentadienyl esters (XXII) of peanut oil fatty acids, epoxy esters of XXII, dihydrodicyclopentadienyl esters (XXIII) of linseed oil fatty acids, epoxy esters of XXIII, dihydrodicyclopentadienyl esters (XXIV) of sunflower oil fatty acids, epoxy esters of XXIV, dihydrodicyclopentadienyl esters (XXV) of a dimerized fatty acid, and epoxidized XXV. XIV 100 is heated at 120°, phthalic anhydride 60 dissolved in XIV, PhCH2NMe2 2 parts by weight added, and the mixture cured 12 hrs. at 120° and 24 hrs. at 140° to give a formulation, pot life (120°) 4 hrs. 22 min., H2O absorption (7 days at 25°) 0.55%, shrinkage (cyclic test): slight cracks after 2nd cycle, dielec. strength (20°) 430 v./mil; 10 min., 1.53%, shattered into pieces after 1st cycle, and 305 v./mil, resp., for the control (EP 201).

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=> => d stat que l27
L1             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  ERYTHROPOIETIN/CN
L2          2283 SEA FILE=REGISTRY ABB=ON  PLU=ON  ERYTHROPOIETIN? NOT L1
L3             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  THAM/CN
L4               SEL  PLU=ON  L1 1- CHEM :        9 TERMS
L5         47045 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L4
L6         47188 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L5 OR L2 OR ERYTHROPOIETIN OR
                 EPO
L7               SEL  PLU=ON  L3 1- CHEM :       53 TERMS
L8        138363 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L7
L9        138382 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L8 OR THAM OR TRISHYDROXYMETHY
                 LAMINOMETHANE OR TRIS?(A)HYDROXY?(A)METHYL?(A)AMINO?(A)METHAN?
L13        14931 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1 OR ERYTHROPOIETIN?
L14         6724 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR TRISHYDROXYMETHYLAMINOME
                 THANE?
L15           18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L13 AND L14
L16         3140 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6(L)(SOLUTION OR FORMULAT?)
L21          309 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ARNOLD STEPHEN?/AU OR ARNOLD
                 S/AU OR ARNOLD S ?/AU
L22           20 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("FRANSSEN O"/AU OR "FRANSSEN
                 OKKE"/AU)
L23            5 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ("MEKKING A"/AU OR "MEKKING
                 ALBERT"/AU)
L24            0 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21 AND (L22 OR L23)
L25            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND L23
L26            1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L21 OR L22 OR L23) AND (L6
                 OR L9)
L27            0 SEA FILE=HCAPLUS ABB=ON  PLU=ON  (L24 OR L25 OR L26) NOT (L15
                 OR L16)

=>
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=> d his ful

     FILE 'REGISTRY' ENTERED AT 10:22:15 ON 15 APR 2008
L1             1 SEA ABB=ON  PLU=ON  ERYTHROPOIETIN/CN
L2          2283 SEA ABB=ON  PLU=ON  ERYTHROPOIETIN? NOT L1
L3             1 SEA ABB=ON  PLU=ON  THAM/CN

     FILE 'HCAPLUS' ENTERED AT 10:24:05 ON 15 APR 2008

     FILE 'REGISTRY' ENTERED AT 10:24:44 ON 15 APR 2008
                SET SMARTSELECT ON
L4              SEL PLU=ON  L1 1- CHEM :        9 TERMS
                SET SMARTSELECT OFF

     FILE 'HCAPLUS' ENTERED AT 10:24:45 ON 15 APR 2008
L5          47045 SEA ABB=ON  PLU=ON  L4
L6          47188 SEA ABB=ON  PLU=ON  L5 OR L2 OR ERYTHROPOIETIN OR EPO

     FILE 'REGISTRY' ENTERED AT 10:26:08 ON 15 APR 2008
                SET SMARTSELECT ON
L7              SEL PLU=ON  L3 1- CHEM :       53 TERMS
                SET SMARTSELECT OFF

     FILE 'HCAPLUS' ENTERED AT 10:30:14 ON 15 APR 2008
L8         138363 SEA ABB=ON  PLU=ON  L7
L9         138382 SEA ABB=ON  PLU=ON  L8 OR THAM OR TRISHYDROXYMETHYLAMINOMETHANE
                   OR TRIS?(A)HYDROXY?(A)METHYL?(A)AMINO?(A)METHAN?
L10           159 SEA ABB=ON  PLU=ON  L6(L)L9
L11       3585784 SEA ABB=ON  PLU=ON  (SOLUTION/CV OR DISSOLUTION/CV) OR
                  ?SOLUTION?
L12            37 SEA ABB=ON  PLU=ON  L10 AND L11
L13         14931 SEA ABB=ON  PLU=ON  L1 OR ERYTHROPOIETIN?
L14          6724 SEA ABB=ON  PLU=ON  L3 OR TRISHYDROXYMETHYLAMINOMETHANE?
L15            18 SEA ABB=ON  PLU=ON  L13 AND L14
                  D STAT QUE L15
                  D IBIB ABS HITSTR L15 1-18
L16          3140 SEA ABB=ON  PLU=ON  L6(L)(SOLUTION OR FORMULAT?)
L17            37 SEA ABB=ON  PLU=ON  L10 AND L12
L18            36 SEA ABB=ON  PLU=ON  L17 NOT L15
                  D STAT QUE L18
                  D IBIB ABS HITSTR L18 1-36
L21           309 SEA ABB=ON  PLU=ON  ARNOLD STEPHEN?/AU OR ARNOLD S/AU OR
                  ARNOLD S ?/AU
L22            20 SEA ABB=ON  PLU=ON  ("FRANSSEN O"/AU OR "FRANSSEN OKKE"/AU)
L23             5 SEA ABB=ON  PLU=ON  ("MEKKING A"/AU OR "MEKKING ALBERT"/AU)
L24             0 SEA ABB=ON  PLU=ON  L21 AND (L22 OR L23)
L25             1 SEA ABB=ON  PLU=ON  L22 AND L23
L26             1 SEA ABB=ON  PLU=ON  (L21 OR L22 OR L23) AND (L6 OR L9)
L27             0 SEA ABB=ON  PLU=ON  (L24 OR L25 OR L26) NOT (L15 OR L16)
                  D STAT QUE L27


     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   14 APR 2008  HIGHEST RN 1014671-54-5
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DICTIONARY FILE UPDATES: 14 APR 2008 HIGHEST RN 1014671-54-5

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Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

FILE HCAPLUS



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This file contains CAS Registry Numbers for easy and accurate substance identification.